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April 15, 2002

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RE: AFC Supplement B
Cosumnes Power Plant (01-AFC-19)

On behalf of the Sacramento Municipal Utility District, we are filing 125 copies of Supplement B to the AFC. This supplement analyzes potential impacts to the project from the compressor stations required for Phase 2, valve stations, the addition of a construction access road, and the widening of the transmission line corridor to add 3 additional poles.

Please call me if you have any questions.

Sincerely,

CH2M HILL

John L. Carrier, J.D.
Program Manager

c: Colin Taylor/SMUD
Kevin Hudson/SMUD
Steve Cohn/SMUD

COSUMNES POWER PLANT (01-AFC-19)

AFC SUPPLEMENT B

Submitted by

SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)

April 15, 2002

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APPENDIX 1B Additional Owners Adjacent to the Gas Line

1.0 INTRODUCTION

The Sacramento Municipal Utility District (SMUD or District) proposes to develop a natural gas-fueled power plant at the southern edge of Sacramento County, California called the Cosumnes Power Plant (CPP). On September 13, 2001, the District filed an Application for Certification (AFC) with the California Energy Commission (CEC). Supplemental materials, added to the AFC as a result of the CEC's October 11, 2001 Data Adequacy recommendation letter, were docketed on November 13, 2001. Supplement A, assessing the potential impacts from a change in the plant's general arrangement, was filed on March 15, 2002.

The District is filing this Supplement B to the Cosumnes Power Plant AFC to provide the Commission and the public with additional information regarding the compressor stations required for Phase 2 of the plant to have sufficient gas line pressure to operate. It also addresses, in response to community concerns, a rerouting of construction traffic around the populated area of Clay East Road. In addition, SMUD is seeking to widen the transmission line corridor to allow two sets of transmission poles between the CPP switchyard and the Rancho Seco switchyard, plus make small adjustments to the proposed CPP and Rancho Seco switchyard tie-ins to accommodate a third line.

1.1 Gas Pipeline

When Phase 2 of the project is constructed, additional natural gas supply will be needed. To provide that gas supply, compressor stations will need to be added in Winters, CA and near the Carson Cogeneration plant in Elk Grove, CA. These stations are described below.

In addition, three valve stations will be added to the gas line to provide for emergency shut-off capability. Both the compressor and valve stations were described in Data Response #89 (Set 1A), but have been included here to allow their potential impacts to be addressed in more detail. At the interconnection and valve stations, mainline valves will be below ground, with valve operators visible above ground.

1.1.1 Gas Compressor Stations

In order for the new 26-mile gas line to supply sufficient fuel for Phase 2 of the project, a gas compressor station will need to be added at both Winters, CA and at the valve #190 crosstie in Elk Grove, CA. A 4,152 HP electric-driven compressor would be required at Winters and a 2,191 HP electric-driven compressor at the valve #190 crosstie.

1.1.1.1 Compressor Station at Winters, CA (second phase)

A compressor will be installed within the existing inter-tie station located at 27700B County Road 29 in Winters, CA (see Figure 1-1, figures are at the end of each section). The Winters Compressor Station is located on Road 29 in the SE 1/4 of Section 29, T9N, R1W in Yolo County. Road 29 borders the south side of the compressor station. The compressor is anticipated to be skid mounted, approximately 10 feet x 20 feet x 8 feet high, surrounded on four sides by an acoustical wall or in an acoustical enclosure for noise attenuation. The existing inter-tie station is currently surrounded by a slatted fence enclosure. The area is surrounded by orchards with the nearest residences about 0.1 mile away.

A list of property owners within a 1,000-foot radius of the compressor station at Winters is provided in Appendix A.

1.1.1.2 Compressor Station at Valve #190 Crosstie (second phase)

The Valve #190 Crosstie Compressor Station will be installed at the existing inter-tie located at the crosstie measurement and valve #190, which is located within the Sacramento Regional Wastewater Treatment Plant buffer lands, north of the Carson Cogeneration Plant (see Figure 1-2). Two gravel access roads lead into the site; one from the west and the other from the south.

The compressor is anticipated to be skid mounted, approximately 10 feet x 20 feet x 8 feet high, within a slatted fence enclosure or surrounded by acoustical walls or within an acoustical enclosure. The nearest residences are 1,000+ feet away. Since this compressor station is located on the Sacramento Regional Wastewater Treatment Plant site, no additional property owners need to be identified since the Sacramento Regional County Sanitation District was included in the list of adjacent property owners included in Appendix 1A of the AFC.

1.1.2 Interconnection and Valve Stations

The AFC considered the construction of the interconnection and valve stations as part of the construction impacts from building the gas pipeline. However, the AFC did not identify the location of these structures. Therefore, they have been included in this Supplement so that any potential impacts from their proposed location can be addressed.

At the interconnection and valve stations, all mainline valves will be below ground. The only items to be above ground will be the high head extensions for the valves (about 3.5 feet above the ground surface), a blow off stack (about 8 feet above the ground surface and up to 10 inches in diameter), and a Remote Terminal Unit (RTU) for the SCADA (a metal box about 3 feet x 3 feet x 4 feet tall). The RTU will be enclosed in a 5-foot x 8-foot x 8-foot structure. Each net usable space will be enclosed by a slatted, 6-foot cyclone fencing and topped with barbed wire.

1.1.2.1 Interconnection Station

The new pipeline will connect to SMUD's existing pipeline at an interconnection station located in the agricultural field immediately south of the Carson Cogeneration facility at the intersection of Laguna Station Road and Glacier Way (see Figures 1-3 and 1-4). A buried pipeline, irrigation equipment, and power poles are in the general valve station location. This area was previously disturbed by agricultural and construction-related activities.

At the interconnection, there will also be a launcher for pigging operation. The launcher station is about 10 feet x 10 feet x 5 feet tall.

1.1.2.2 Valve Station 1

This station will occupy a net usable space of 50 feet by 50 feet on the north side of Core Road and west side of Bruceville Road, Sacramento County, California (see Figure 1-5). Station facilities include, buried valves with elevated stems, a pipeline blow down stack and control equipment and RTU.

1.1.2.3 Valve Station 2

This station will occupy a net usable space of 50 feet by 50 feet on the northwest corner of Arno and Valensin roads, Sacramento County, California (see Figure 1-6). Station facilities include buried valves with elevated stems, a pipeline blow down stack and control equipment and RTU.

1.1.2.4 Valve Station 3

This station will occupy a net usable space of 100 feet by 100 feet on the southwest corner of Valensin and Alta Mesa roads, Sacramento County California (see Figure 1-7). Station facilities include above ground valves, buried valves with elevated stems, a pipeline blow down stack, a pig launcher, RTU and control equipment.

1.2 Construction Access Road

Workshops in the Herald community have identified a potential safety concern with the project. Local residents are concerned for the safety of their children that walk along the side of Clay East Road to catch their school bus and to return to their homes after the bus drops them off. In response to these concerns, SMUD is proposing to develop an access road along the east side of the Rancho Seco Plant (RSP). It is proposed that construction workers and equipment access the CPP site by traveling east along Twin Cities Road, turning south into the joint entrance of RSP and Rancho Seco Park. The workers would then follow the road to Rancho Seco Park for a short distance. Once past the park's entrance gate, the workers would turn south and follow a road that would be constructed from the gate house due south to Clay East Road (see Figure 1-8).

The construction access road will be two lanes, 24 feet wide (12 feet per lane), asphaltic concrete on a raised gravel base, with several drainages to accommodate naturally occurring seasonal flows. The road will be designed to the handle heavy loads needed for construction of the plant.

1.3 Transmission Line Corridor and Switchyard Arrangement

Originally, the transmission line was planned to require one set of three transmission poles between the CPP switchyard and the RSP switchyard. However, to enhance reliability for CPP, provide flexibility for Phase 2, and use existing tie-in positions at the RSP switchyard, SMUD would like to widen the corridor to allow two sets of poles from CPP to RSP. Each set of towers would require a corridor 25 feet wide. Therefore, the required width of the transmission line corridor would be 50 feet (see Figure 1-8). An access road will not be needed for construction. The pole foundations will be approximately 6 feet in diameter and 20 feet deep. No laydown area will be needed. Construction will occur by using a drill rig to dig the foundation and then bring in the transmission line tower with a crane.

A total of three overhead circuits would be constructed between the CPP switchyard and the RSP switchyard (Figure 1-9). The circuits would be carried on one set of double-circuit steel pole structures and one set of single-circuit single pole structures. In other words, two sets of transmission line towers (6 towers in all) and all three lines would be constructed as part of Phase 1. The Phase 2 construction would use the same sets of towers and lines with the addition of the second phase of the CPP switchyard.

To accommodate the third circuit, the CPP switchyard will consist of eleven, 230-kV SF_6 insulated circuit breakers. The main buses will be designed for 2,000-amp continuous current. Because the total output of the CPP switchyard is expected to be in the range of 3,000 to 4,000 amps, at least 2 of the 3 lines must be in service to transmit the full capacity of the facility to the RSP switchyard. If one circuit is out for maintenance, or should one circuit fail, the remaining two circuits would not be subject the plant to an operational limitation.

As before, auxiliary power transformers connected to the step-up transformer side of the generator breakers on each gas turbine generator will serve to start-up the plant and provide power for all auxiliary loads within CPP. But power will be distributed via 4-kV metal-clad switchgear, instead of 5-kV metal-clad switchgear.

As depicted on Figures 1-10 and 1-11, the RSP switchyard currently has three existing positions that can accept the three lines from CPP. As part of the RSP decommissioning, the existing circuits that currently support plant activities are no longer needed or have been significantly reduced making the existing position available for interconnection with CPP.

Reusing these three positions provides the District significant benefits in reduced capital and operation and maintenance costs, increased reliability and requires no modification to the existing switchyard structure.

The three overhead circuits will exit the CPP switchyard and align due north, parallel to and approximately 80 feet to the east of the existing PG&E easement, for approximately 0.3 mile, where they will bear northeast 0.1 mile toward the existing structures at the east side of the RSP switchyard Figure 1-11. Interconnection to the RSP switchyard will be made at 3 existing tie-in positions on the east side of the switchyard. Turning towers at each position will align the three circuits from CPP into the existing positions.

1.4 Organization of Supplement B

AFC Supplement B is divided into the following sections. Section 2.0 provides an analysis of the proposed compressor stations and valve stations. Section 3.0 analyzes the potential environmental impacts associated with the construction access road. Section 4.0 provides an analysis of the potential impacts from the wider transmission corridor and Section 5.0 looks at the cumulative impacts of these changes.

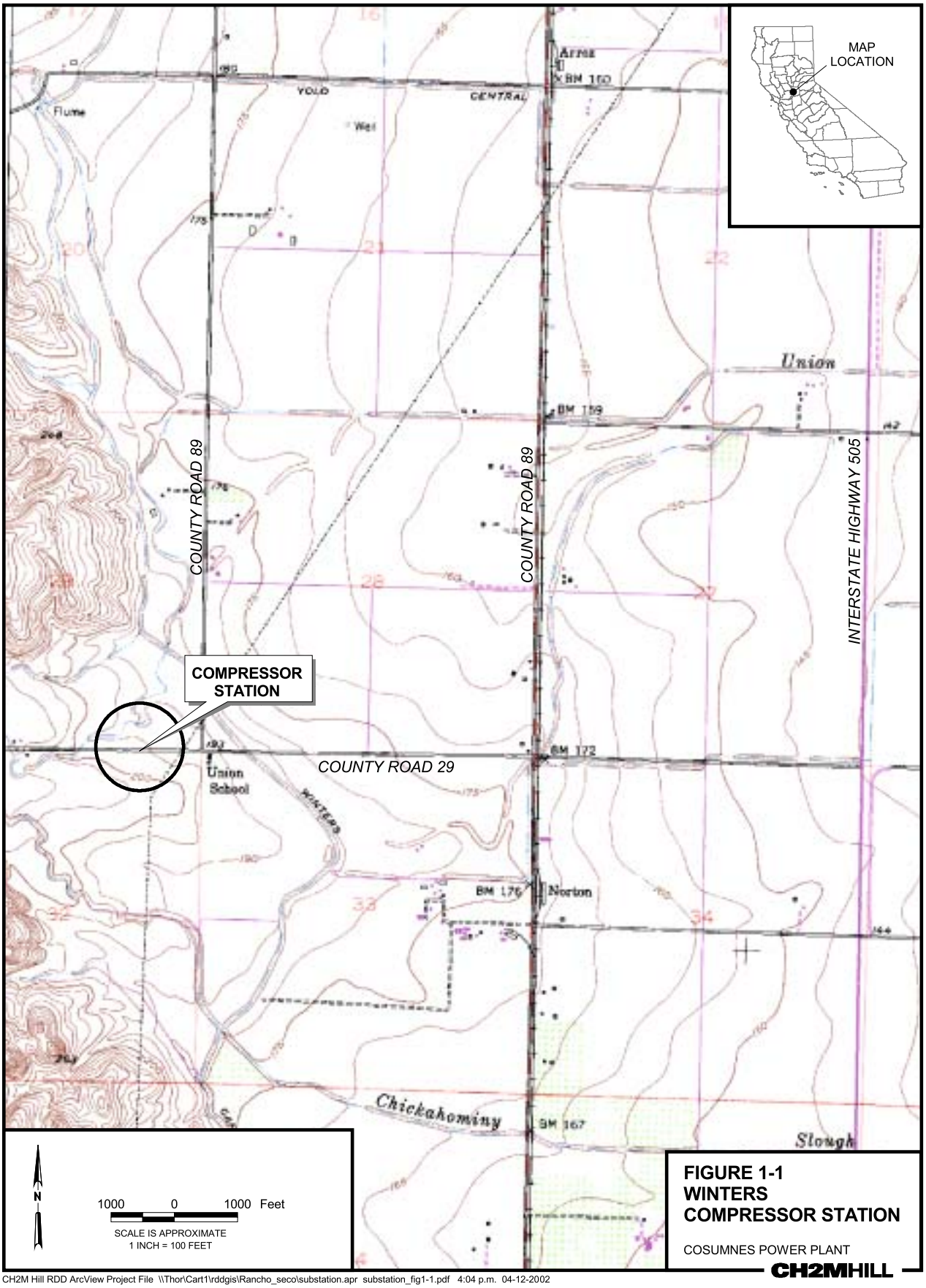

FIGURE 1-1
WINTERS
COMPRESSOR STATION

COSUMNES POWER PLANT

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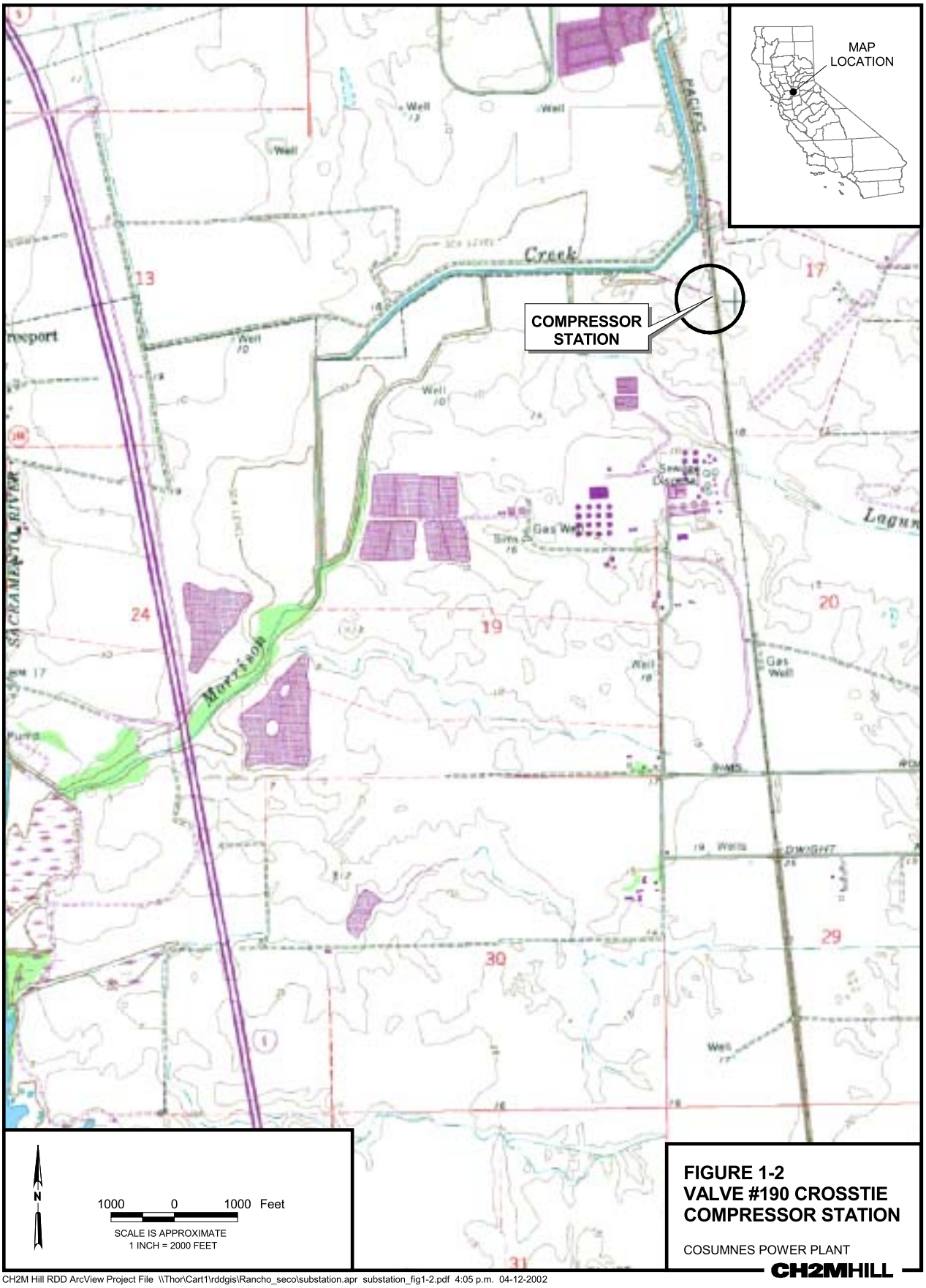

FIGURE 1-2
VALVE #190 CROSSTIE
COMPRESSOR STATION

COSUMNES POWER PLANT

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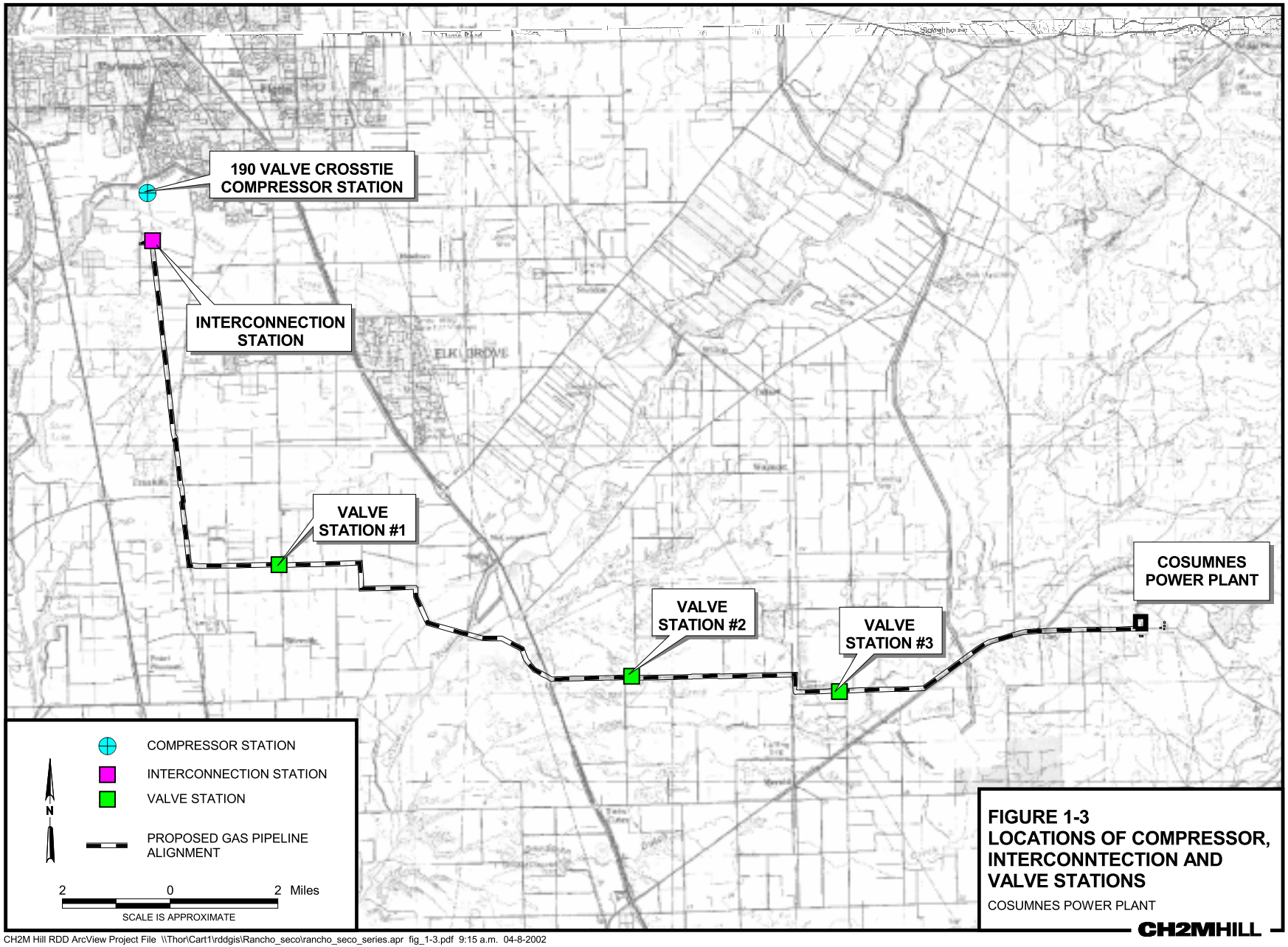

FIGURE 1-3
LOCATIONS OF COMPRESSOR, INTERCONNTECTION AND VALVE STATIONS
COSUMNES POWER PLANT

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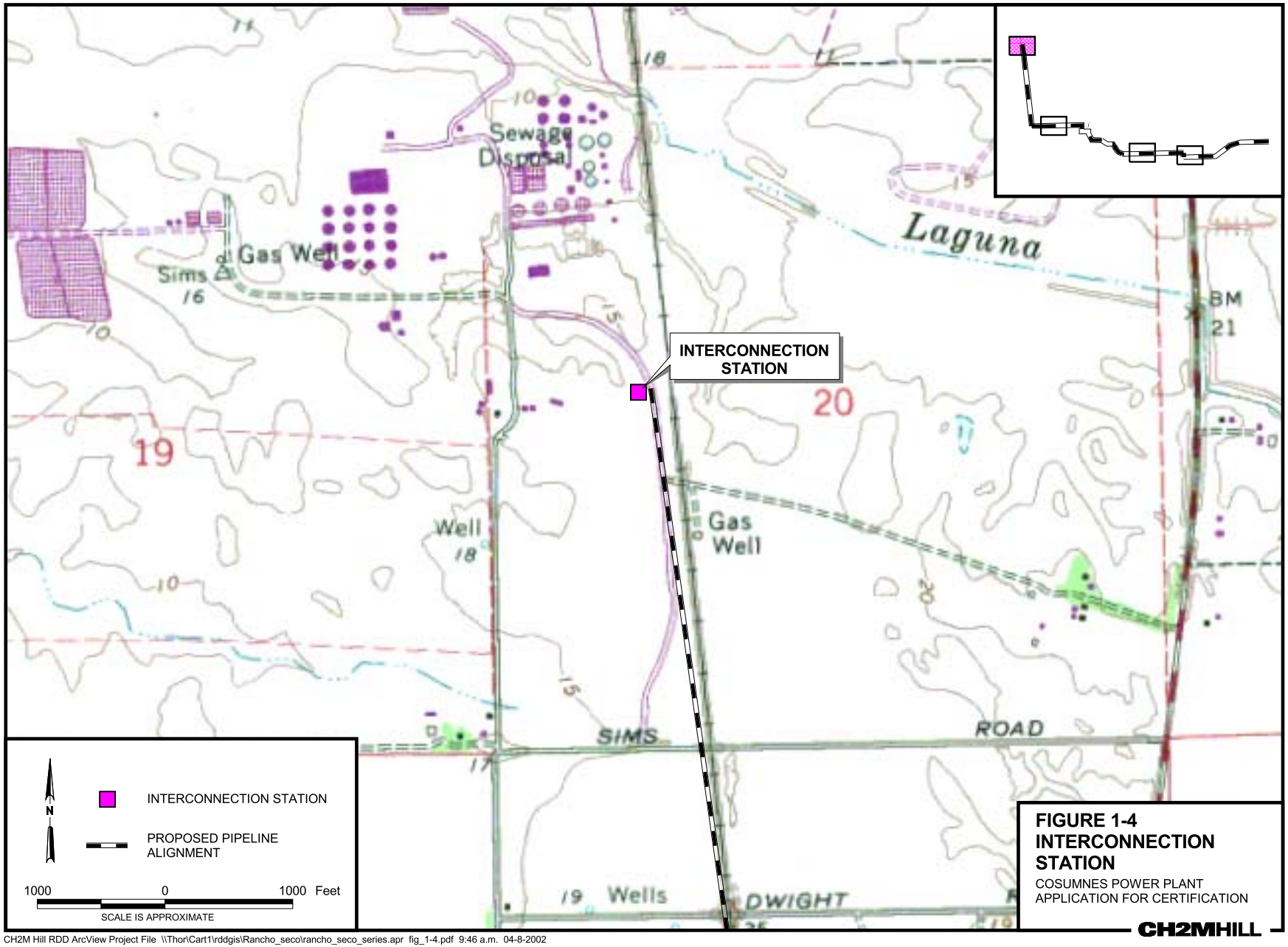

FIGURE 1-4
INTERCONNECTION STATION
COSUMNES POWER PLANT
APPLICATION FOR CERTIFICATION

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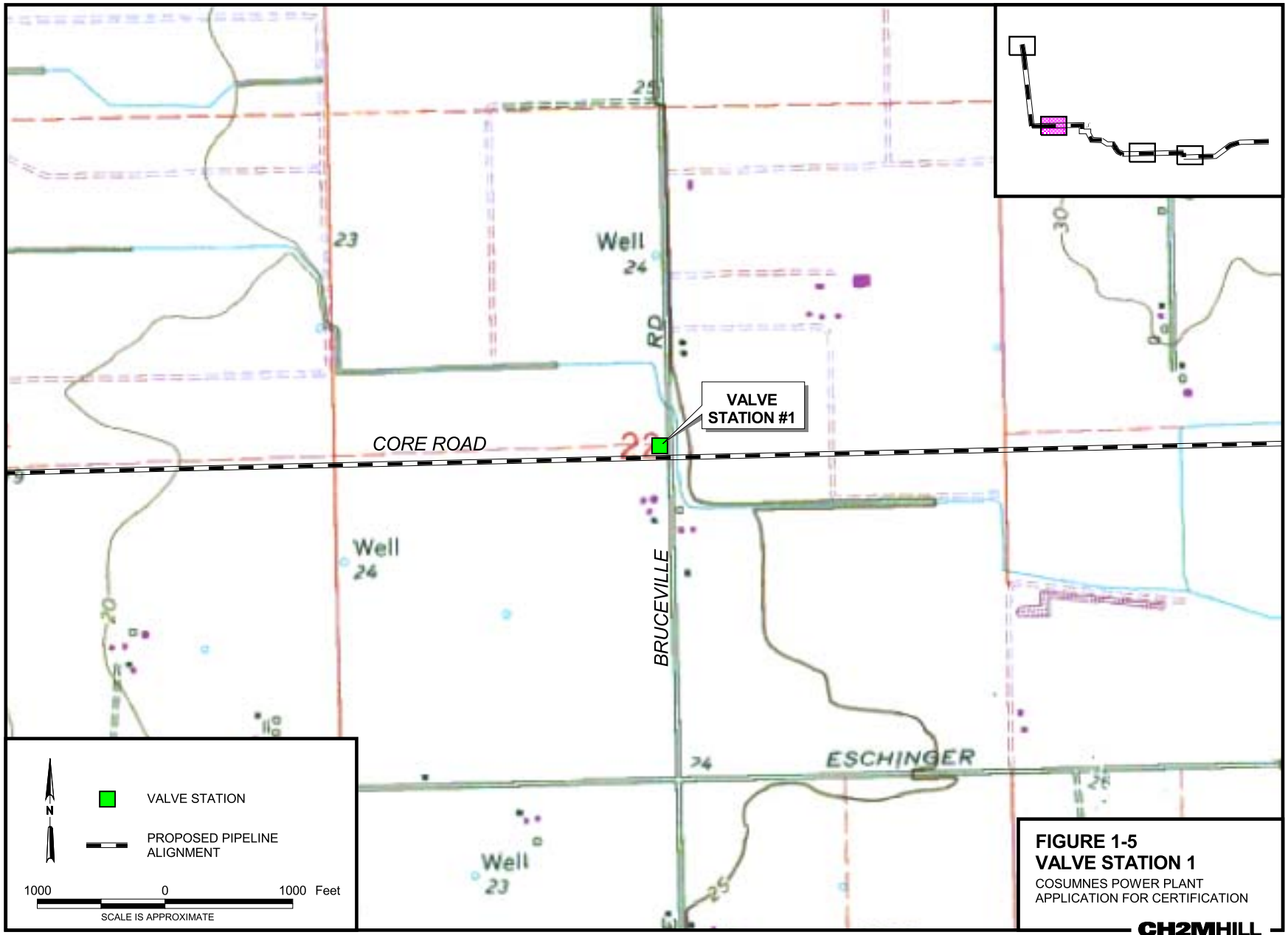

FIGURE 1-5
VALVE STATION 1
COSUMNES POWER PLANT
APPLICATION FOR CERTIFICATION

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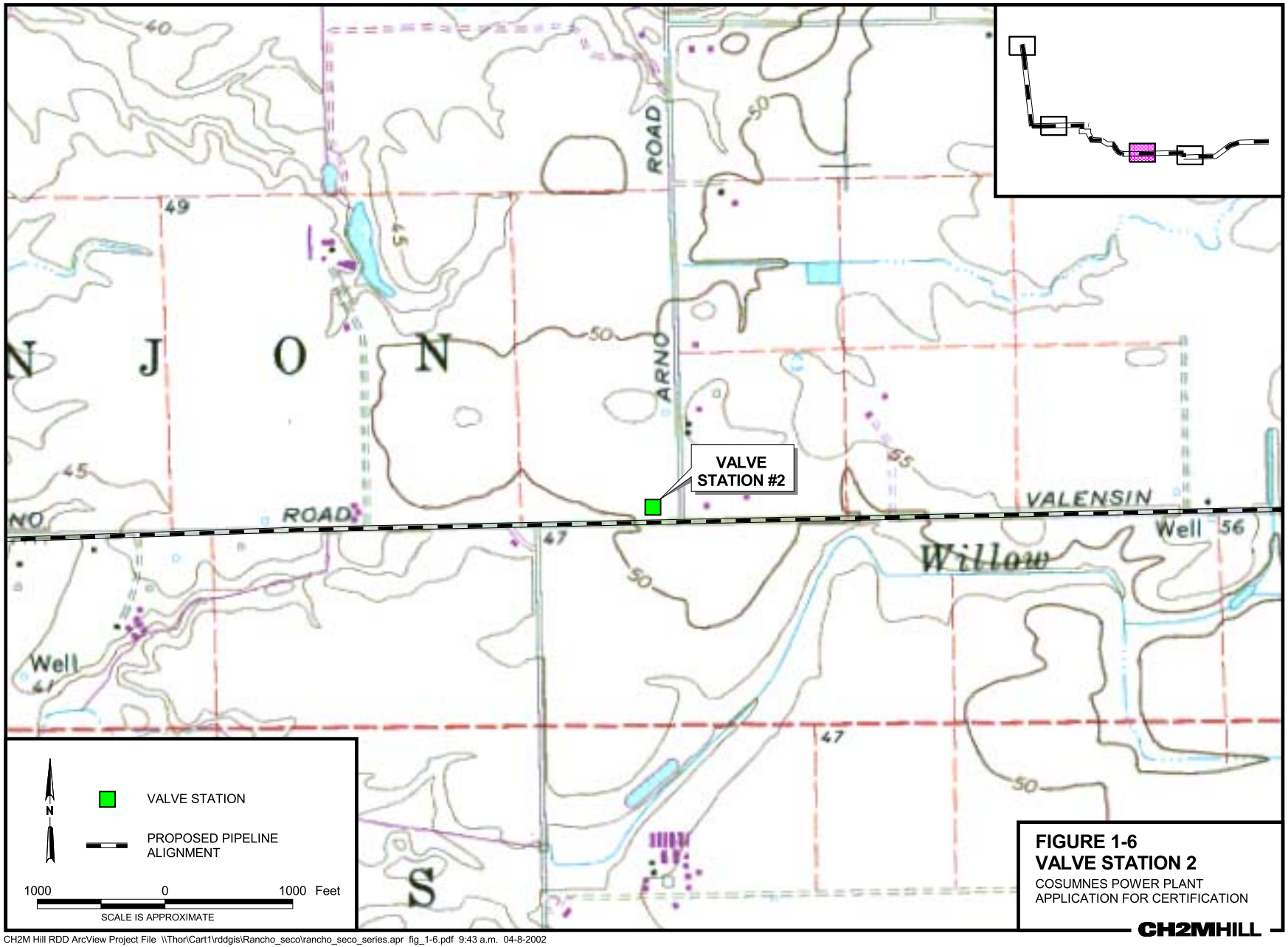

FIGURE 1-6
VALVE STATION 2
COSUMNES POWER PLANT
APPLICATION FOR CERTIFICATION

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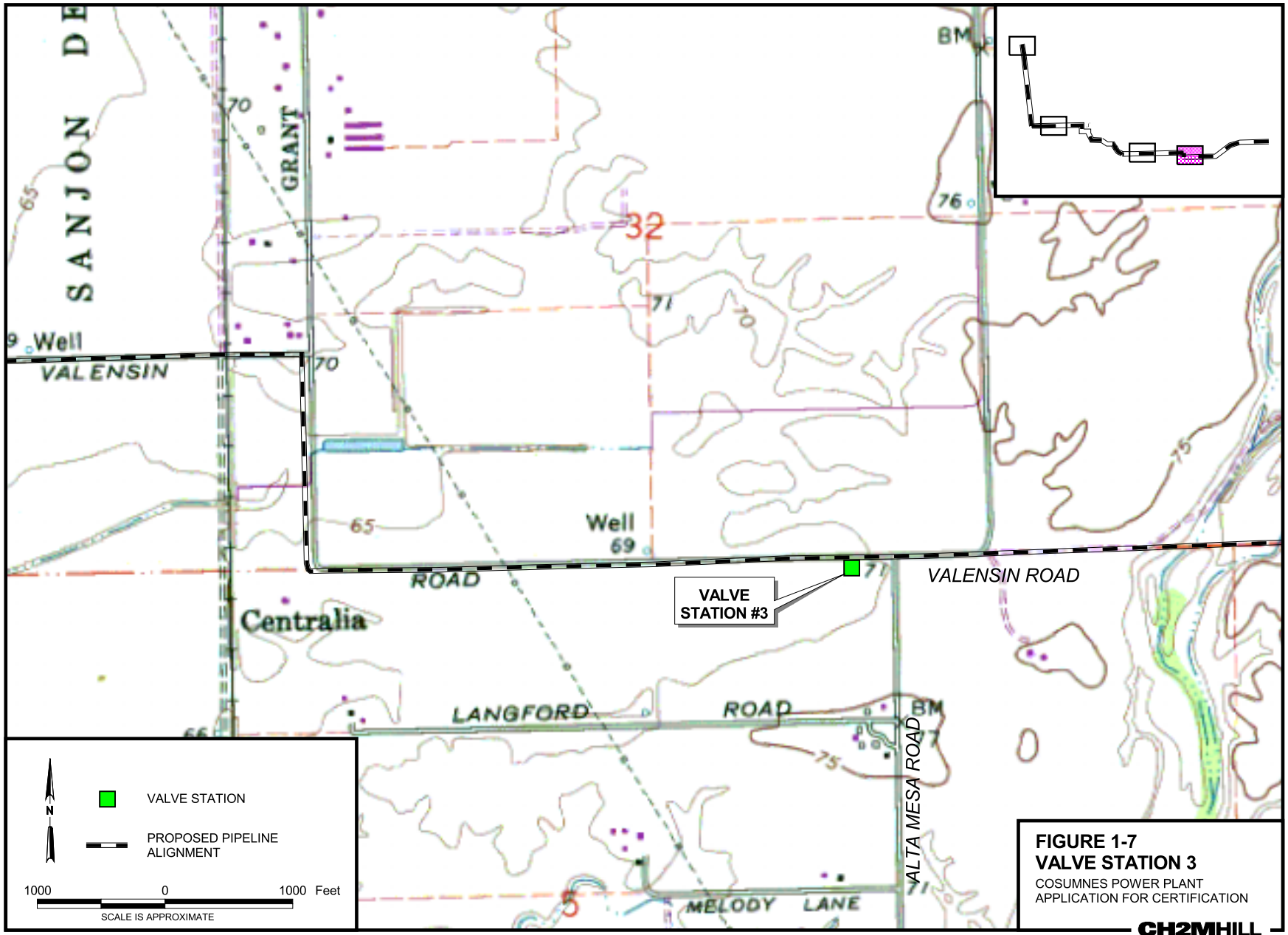

FIGURE 1-7
VALVE STATION 3
COSUMNES POWER PLANT
APPLICATION FOR CERTIFICATION

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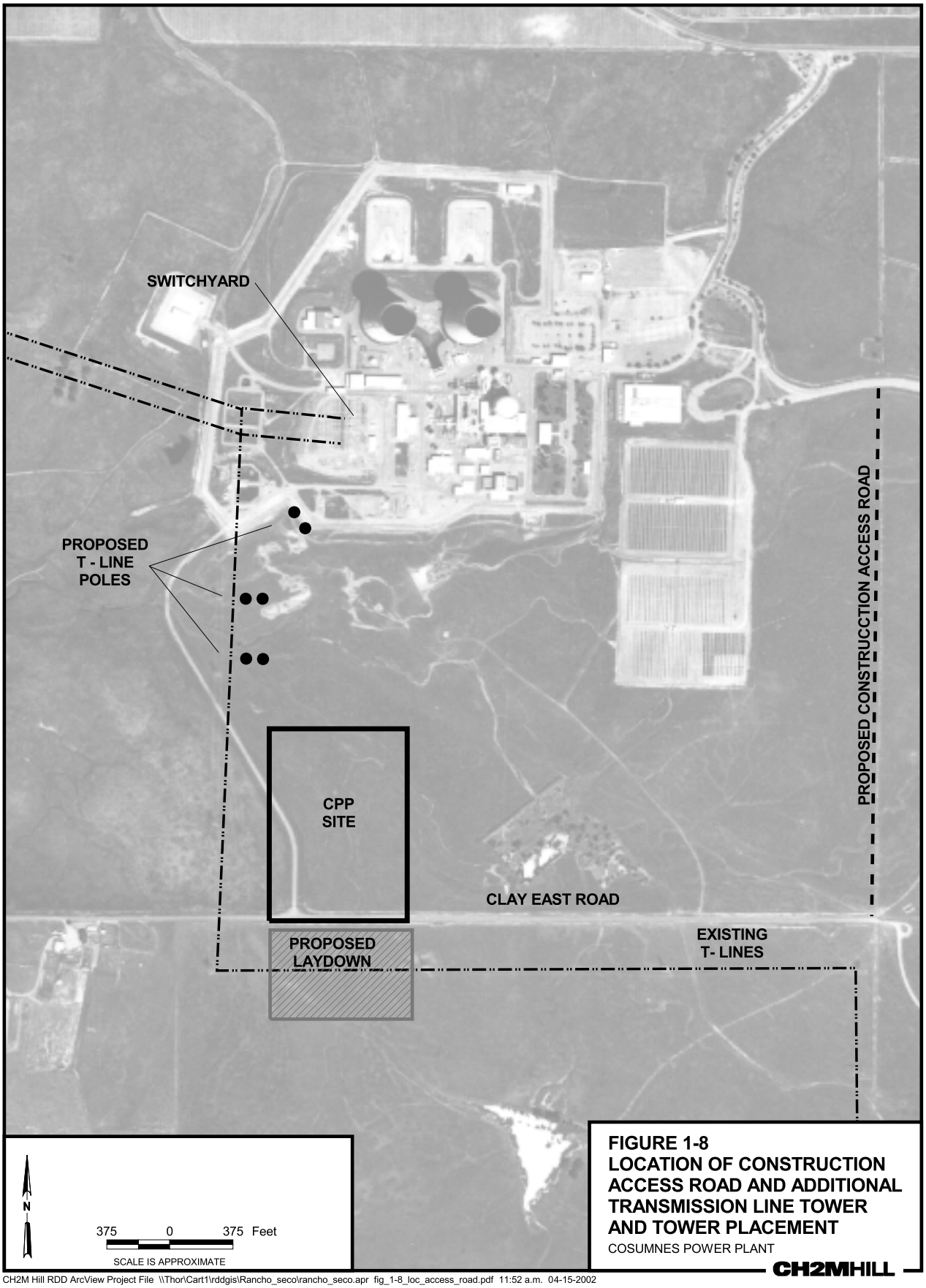

FIGURE 1-8
LOCATION OF CONSTRUCTION ACCESS ROAD AND ADDITIONAL TRANSMISSION LINE TOWER AND TOWER PLACEMENT
COSUMNES POWER PLANT

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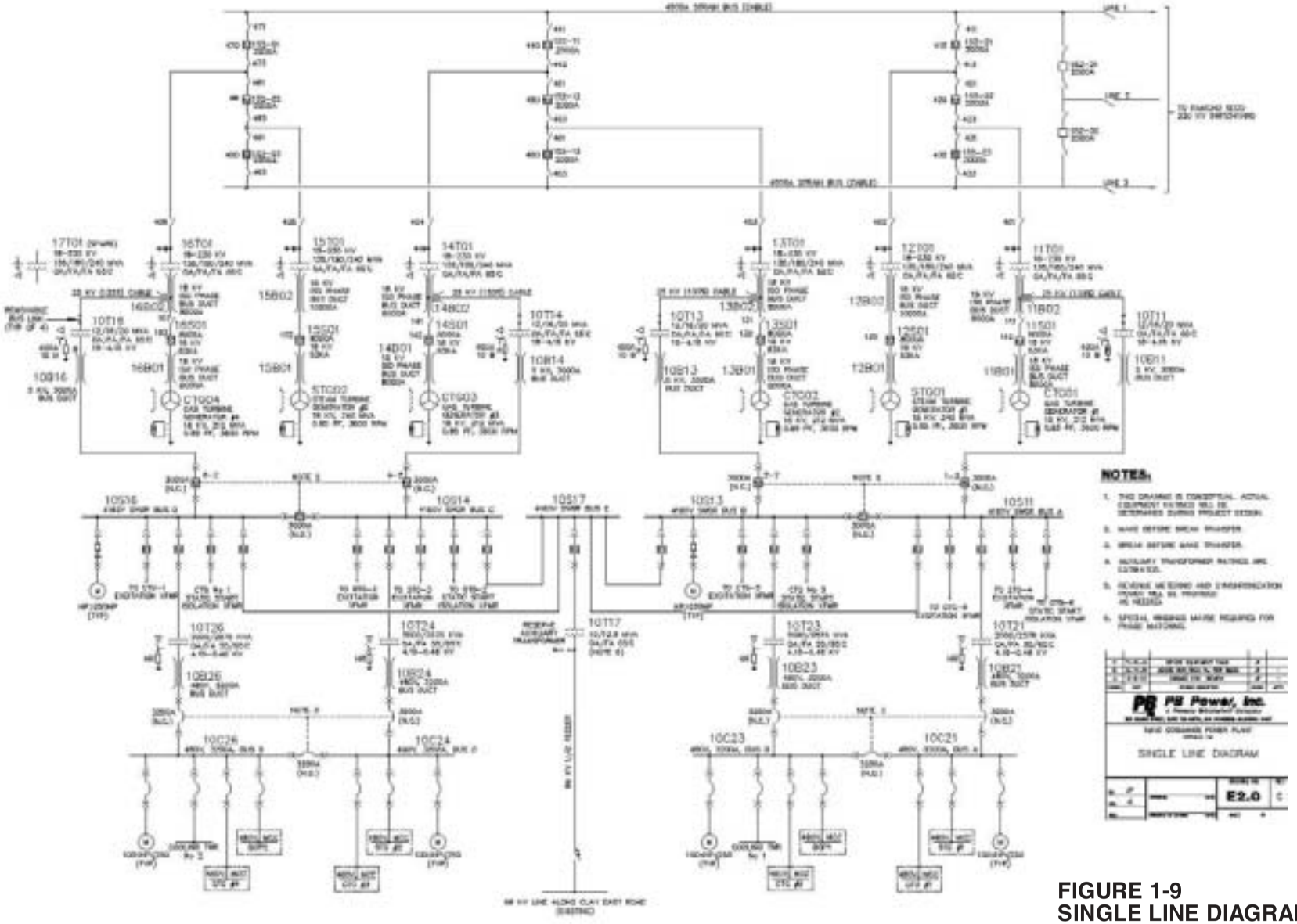

FIGURE 1-9
SINGLE LINE DIAGRAM
COSUMNES POWER PLANT

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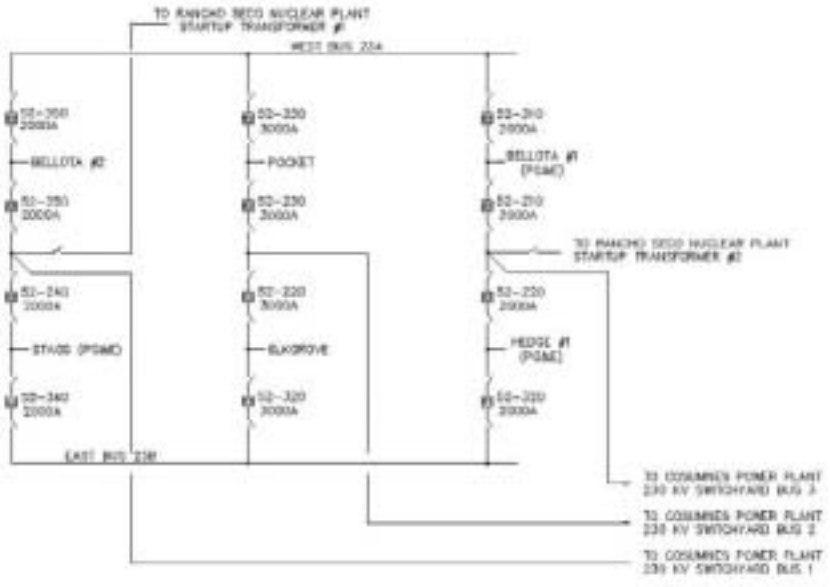

FIGURE 1-10
ONE LINE DIAGRAM
RANCHO SECO SWITCHYARD

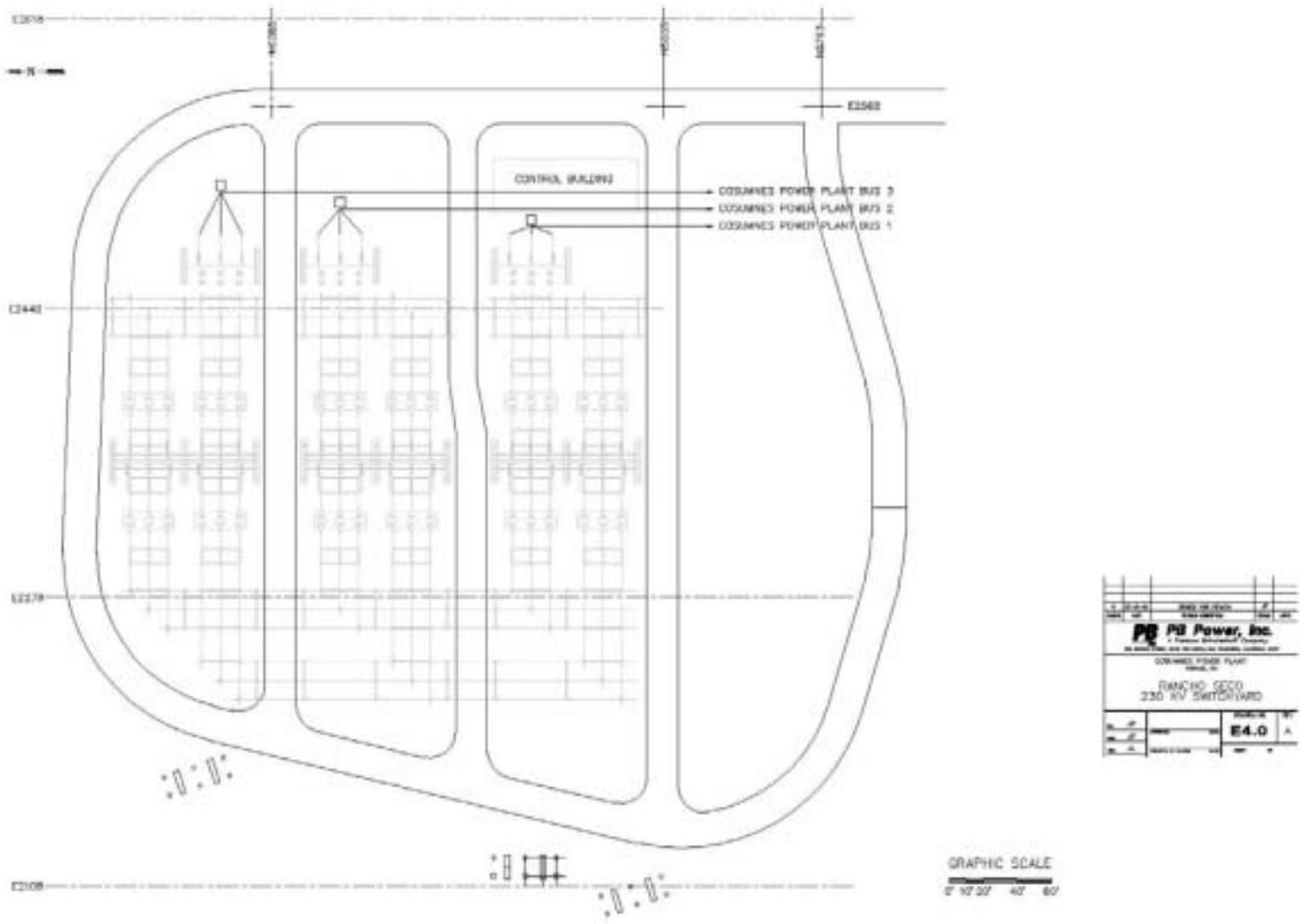

FIGURE 1-11
RANCHO SECO 230 KV SWITCHYARD
COSUMNES POWER PLANT

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2.0 ANALYSIS OF COMPRESSOR AND VALVE STATIONS

This section addresses potential impacts resulting from the construction of the compressor and valve stations. In addition, mitigation measures are included, if necessary, to reduce the nature or type of impacts below the level of significance.

2.1 Air Quality

The construction of the compressor stations will result in a very minor temporary and finite increase in the production of criteria and non-criteria air pollutants in the form of fugitive dust and tailpipe emissions from construction equipment. As these elements of the project construction are expected to span a few weeks in total, the associated additional air emissions would not be significant due to the limited nature of the construction. Fugitive dust emissions will be minimized by employing dust suppression measures. Tail-pipe emissions will be minimized by limiting the amount of engine idling, maintaining construction equipment within manufacturer's specifications, and limiting the number of construction machines used.

Because the compressor and valve stations are electrically operated and not driven by an internal combustion engine or gas turbine, their operational emissions will be limited to fugitive VOC emissions from valve packing glands, possible intermittent leakage from flanges, and shaft seals. These fugitive VOC emissions will not be significant due to the low VOC content of the natural gas and the intrinsically low leak rates for the valves, flanges, and seals.

2.2 Biological Resources

2.2.1 Winters Compressor Station

The construction of the compressor stations would have a small potential for temporary disturbance to biological resources, and no significant long-term effects.

The Winters compressor station is located within a fenced compound on packed earth and gravel. Nearly all vegetation within the fenceline was removed as part of the original construction at this site and the area within the fenceline supports no significant wildlife or biological habitat. The surrounding area for a distance of 1,000 feet is largely agricultural and rural residential habitat. To the north, the compressor station is entirely surrounded by an almond orchard. To the south, the station is bordered by a paved 2-lane road, a steep berm and wide open field that appear to be disked and mowed for hay. Barley, filaree, mustard and other meditterranean grassland species dominate these fields. West of the compressor station is a small drainage, but culverts and grading have modified this to the extent that there is nearly no vegetation present and no significant wildlife habitat. There is one black walnut tree approximately 100 yards southwest of the compressor station, but no indications of raptor nesting were observed in April 2002. Many more large walnut, oak, cottonwood and landscape trees occur at 0.1 mile west and beyond, surrounding rural farmhouses and barns. Approximately 0.5 mile west is Chickahominy Slough, which supports a narrow meandering belt of tall cottonwoods and oak trees.

The region within 0.5 mile of the compressor station site supports a wide variety of valley grassland plants and wildlife. Dominant plant species are introduced mediterranean

annuals and farm crops, consistent with the heavy agricultural uses. Wildlife in the area would include grassland and oak woodland birds and mammals, such as yellow-billed magpie, Brewer's and red-winged blackbirds, ring-neck pheasant, pocket gopher, raccoon and opossum. Trees within a mile of the site are suitable to support foraging raptors such as red-tail hawk and Swainson's hawk, although none was specifically observed on April 2, 2002. The area that would be directly affected by project construction is not suitable to support threatened, endangered or sensitive species. The surrounding vicinity for a distance of 0.5 mile probably supports Swainson's hawk foraging. The high level of agricultural development in the area makes it unlikely that special status plants occur in the area.

Construction of the proposed compressor station would cause a small amount of local disturbance at and within the compressor station fenced area, but the level of disturbance would be consistent with farming and residential activities that occur in the area. Construction would be brief (estimated at less than 3 weeks) and would be unlikely to cause significant disturbance to wildlife species in this area.

Operation of the proposed compressor station would cause no significant visible or audible disturbance to wildlife in the area because the compressor station is surrounded by low-value habitats. The compressor station would be consistent with the kinds of developments present now, and wildlife species in this area are relatively accustomed to a low level of residential and farming disturbance.

2.2.2 Valve #190 Crosstie Compressor Station

The Valve #190 Crosstie compressor station would also be located within a fenced compound on packed earth. Nearly all vegetation within the fenceline was removed as part of the original construction at this site and the area within the fenceline supports no significant wildlife or biological habitat. The surrounding area for a distance of 1,000 feet is dominated by the open annual grasslands of the Sacramento Regional Wastewater Treatement Plant bufferlands. To the northwest, the vicinity is dominated by dense residential development with essentially no biological value. To the east, south and west, the station is bordered by open grassland, with a lined portion of Morrison creek passing within 0.1 mile. Introduced annual mediterranean grassland species dominate these fields. Many sensitive species have been recorded in the general region, including burrowing owls, Swainson's hawk, fairy shrimp, and possibly giant garter snake. However, the compressor station itself is isolated and barren, and is unlikely to support these species.

Construction of the proposed compressor station would cause a small amount of local disturbance at and within the compressor station fenced area. Because sensitive species could be present in the vicinity, construction should constrained to the non-nesting season, when impacts are unlikely to occur. Pre-construction surveys would be appropriate and sufficient to ensure that transient wildlife are not dependent on the construction area during these activities. Construction would be brief (estimated at less than 3 weeks) and would be unlikely to cause significant disturbance to wildlife species in this area.

Operation of the proposed compressor station would cause no significant visible or audible disturbance to wildlife in the area because the compressor station would be located on packed earth with essentially no value to wildlife. The compressor station would be consistent with the valve station present now, and wildlife species in this area are relatively accustomed to a low level of noise, visual stimuli and other signs of industrial uses.

2.2.3 Interconnection and Valve Stations

The interconnection and valve stations occupy relatively small areas (80 to 10,000 square feet) generally along roadsides or on agricultural land that has already been substantially altered from its natural condition. The biological values of these areas are compromised by the proximity of an active paved road and by significant habitat alteration. The greatest potential for disturbance is during construction activities, but once installed and operational, impacts of the interconnection and valve stations is insignificant. Additional details are provided below.

2.2.3.1 Interconnection Station

This location is adjacent to two paved roads, in the corner of an agricultural field. This corner is dominated by mediterranean annual grasses and forbs. The site has been substantially modified from the natural condition by grading and construction in the past. The general area supports or has the potential to support several sensitive species including burrowing owls, fairy shrimp and Swainson's hawk. However the closest potential fairy shrimp or owl locality would be separated from the work area by an elevated berm and road. Nearest potential habitat exists 100 feet east of the site. Disturbance for construction would be limited to the west side of the road, where sensitive resources are not present, and no significant adverse effects to biological resources would occur.

2.2.3.2 Valve Station 1

The valve station would be located adjacent to a paved road, in an agricultural field. The region is dominated by row crops such as broccoli, wheat and alfalfa, or hay. The valve station would replace a small area of agricultural habitat with packed earth and gravel. Agricultural fields support disperse use by burrowing owls, Swainson's hawk and similar foraging species, but there are no high-sensitivity habitats such as wetlands or vernal pools at the proposed valve station location, but there is a drainage ditch / creek on the east side of Bruceville Road, approximately 50 feet from the proposed valve station. There would be temporary disturbance of biological resources in this area as a result of construction, but once operational the valve station would have no long-term effects. The paved road between the creek and the proposed valve station is likely to be an effective barrier to any reptiles or small mammals that might cross from the creek. The potential effects of construction would be temporary and long-term impacts would be essentially the loss of 2500 square feet (0.06 acre) of agricultural habitat.

2.2.3.3 Valve Station 2

The valve station would be located adjacent to a busy paved road, in an agricultural field. The region is dominated by pasture, hay and row crops, gradually being replaced by vineyards. The valve station would replace a small area of agricultural habitat with packed earth and gravel. Agricultural fields support disperse use by burrowing owls, Swainson's hawk and similar foraging species, but there are no high-sensitivity habitats such as wetlands or vernal pools at the proposed valve station location. The potential effects of construction would be temporary and long-term impacts would be essentially the loss of 2500 square feet (0.06 acre) of agricultural habitat.

2.2.3.4 Valve Station 3

The valve station would be located adjacent to a paved road, in an agricultural field. The region is dominated by pasture, hay and alfalfa and is gradually being converted to widespread vineyards. The valve station would replace a small area of agricultural habitat with packed earth and gravel. Agricultural fields support disperse use by burrowing owls, Swainson's hawk and similar foraging species, but there are no high-sensitivity habitats such as wetlands or vernal pools at the proposed valve station location. The potential effects of construction would be temporary and long-term impacts would essentially be the loss of 10,000 square feet (0.23 acre) of agricultural habitat.

2.3 Cultural Resources

2.3.1 Winters Compressor Station

2.3.1.1 Archival Research

CHRIS was requested to perform archival research and provide information on possible cultural resources in the project area. Research indicates the area around the Winters compressor station was surveyed in 1964 by Brigham Arnold and in 1990 by Michael Moratto, et al. No sites were recorded in the project area. The Union School (YOL-HRI-3/71) is located about 2,000 feet east of the compressor station on the south side of Road 29. The Site Form indicates the one-room school was constructed in 1912 to serve local student populations until 1968. The school was later converted to a residence.

2.3.1.2 Archaeological Survey

On January 25, 2002, a 300-foot area was surveyed on the north, west, and east sides of the metering station. Parallel transects 15 meters apart were surveyed. The survey revealed ground disturbance from agricultural activities was extensive. Land use in the vicinity of the compressor station consists of orchards on the north, west, and east sides of the facility. Visibility ranged from 75 to 100 percent. No cultural resources were observed.

2.3.2 Valve #190 Crosstie Compressor Station

2.3.2.1 Archival Research

The California Historical Resources Information System (CHRIS) was requested to perform a records search and provide information on possible cultural resources near the project area. Research indicates that two cultural resource studies were conducted near the project area that include a survey for the Carson Cogeneration Project (Ebasco 1992) and a reconnaissance of the Morrison and Laguna Creek floodplains (Johnson 1974). The archival research also indicates that no archaeological sites are currently recorded in the project vicinity.

2.3.2.2 Archaeological Survey

On January 25, 2002, a 300-foot area was surveyed to the north, west, and south of the facility. The area east of the crosstie facility to the base of the railroad fill was also surveyed. Parallel transects fifteen meters apart were surveyed. The area surveyed appears to be an abandoned farm field with extensive ground disturbance. No cultural resources were observed.

2.3.3 Valve Stations

A separate cultural resource report was filed as a supplemental Data Response #41 (Set 1D) that covered the interconnection and valve stations. As described in Attachment CR-41, a cultural resource survey was conducted from January 23 to 26, 2002. All locations were surveyed by CH2M HILL's cultural resource specialist Jim Sharpe (Mr. Sharpe's resume is provided as Attachment CR-209, Data Set 3A). The systematic pedestrian survey was conducted using 25 meter transect intervals. No attempts were made to relocate sites recorded outside project areas.

2.3.4 Native American Heritage Commission

A request was made by CH2M HILL to the Native American Heritage Commission (NAHC) in Sacramento for information related to the project areas. In their March 13, 2002 response they determined that "the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area." The NAHC provided contacts of individuals who may have knowledge of cultural resources in the project area that include:

Cortina Band of Indians (Wintun/Patwin)
Elaine Patterson, Tribal Chairperson
P.O. Box 1630, Williams, CA 95987
(530) 473-3274 voice; 473-3190 voice; 473-3301 fax

Rumsey Indian Rancheria of Wintun (Wintun/Patwin)
Paul Lorenzo, Chairperson
P.O. Box 18, Brooks, CA 95606
(530) 796-3400 voice; 769-2143 fax.

Wintun Environmental Protection Agency (Wintun/Patwin)
P.O. Box 1839, Williams, CA 95987
(530) 473-3318 voice; 473-3319 voice; 473-3320 fax.
Corwepa@hotmail.com

2.3.5 Conclusion

The archival research, Native American Heritage Commission, and the archaeological survey determined that no cultural resources are present at either the Winters Compressor Station, the Valve #190 Crosstie Station, or the interconnection and valve stations. Due to previous ground disturbance in the area, no additional cultural resource investigation will be necessary for any of these locations.

2.3.6 References Cited

Ebasco Environmental. 1992. *Cultural Resources Survey of the Carson Ice-Gen Project, Sacramento County, California.* Report on file, California Historical Resources Information Center, Sacramento State University, California.

Johnson, J.J. 1974. *Reconnaissance Archaeological Survey of the Morrison Stream Group in Sacramento County, California*. Report on file, California Historical Resources Information Center, Sacramento State University, California.

2.4 Land Use

2.4.1 Winters Compressor Station

The compressor station is located in an area that is designated and zoned as agricultural. (The agricultural designations exist for more than ¼ mile in all directions). The compressor station will be located at the current connection of SMUD's pipeline to PG&E's backbone line 400. The surrounding land uses are agricultural. An orchard surrounds the plant on the north side. Hay is currently being grown on the south side of County Road 29.

The new compressor will be installed within the existing facility. The addition of the new compressor would be consistent with the existing land use, as explained in Section 8.4.1.3.1.1. Yolo County confirmed that California Government Code Section 53091 would be applicable to the site because the purpose of the compressor station is for electrical generation (David Morrison, Assistant Planning Director Yolo County, pers. comm.).

2.4.2 Valve #190 Crosstie Compressor Station

This compressor station is located in the buffer area of the Sacramento Regional Wastewater Treatment Plant in Sacramento County. The area is designated and zoned Public/Utility. The construction of this compressor station would be consistent with the other utilities located in this area.

2.4.3 Valve Stations

Valve stations are located in agricultural areas and would be consistent with land use zoning requirements for Sacramento County as explained in Section 8.4.1.3.1.1. Valves 1 and 2 would be located in areas zoned for agriculture and designated as Agriculture/ Cropland. Valve 3 would be located in an area zoned for agriculture and designated General Agriculture.

2.5 Noise

2.5.1 Winters Compressor Station

The following addresses potential noise impacts from the Winters Compressor Station, which is wholly located within unincorporated Yolo County.

2.5.1.1 Laws, Ordinances, Regulations and Standards

The following are the applicable local regulations that apply to noise generated by the Winters Compressor Station. Federal and State LORS are the same as those summarized in Sections 8.5.2.1 through 8.5.2.2 of the AFC.

2.5.1.1.1 Yolo County Noise Regulations

The Yolo County General Plan establishes guidelines for acceptable noise levels depending on the receiving properties land use. Table 2.5-1 summarizes the guidelines.

TABLE 2.5-1
Yolo County Land Use Compatibility Guidelines – DNL (dBA)

Land Use	Clearly Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential	<60	60 – 65	65 – 75	75
Office Buildings, Business, Commercial and Professional	<65	65 – 75	>75	
Industrial	<70	75 – 70	>80	

Furthermore, Yolo County has established the following applicable policies:

- New development of commercial, industrial or other noise generating land uses shall not be permitted if resulting noise levels shall exceed 60 dBA in areas where residential or other noise sensitive land uses exist or are planned.
- New development shall mitigate outdoor and indoor noise levels for existing residences that would be exposed to an increase in noise level of five dBA or more and would be exposed to an DNL in excess of 60 dB.
- Noise sensitive land uses shall not be allowed where the noise due to non-transportation noise sources will exceed an hourly Leq of 55 dB between 7:00 AM and 10:00 PM and 50 dB between 10:00 PM and 7:00 AM. These noise levels shall be lowered by 5 dB for simple tone noises or for noises consisting primarily of speech or music.

It should be noted that the summaries provided above are based on information provided by Linda Caruso of the Yolo County Planning and Public Works Department from the Dunnigan Area General Plan EIR. Ms. Caruso stated that the Yolo County noise requirements were summarized in the Dunnigan Area General Plan EIR and that this would reflect the most comprehensive and current noise requirements.

2.5.1.2 Affected Environment

The compressor will be installed within the existing inter-tie station shown in Figure 1-1. The area is zoned agricultural (refer to Section 2.4 above) with the nearest residences about 0.1 mile to the west. The site is generally flat surrounded by orchards to the north and fields to the south. Sources of environmental noise in the vicinity of the site primarily include local vehicular traffic and noise associated with the neighboring agricultural uses.

2.5.1.2.1 Ambient Noise Survey

Measurements were made at M2, across the street and just east of the nearest sensitive receptor. The precise position is shown in Figure 2.5-1.

Continuous noise-level measurements were conducted using Bruel & Kjaer (B&K) Type 2236 integrating sound level meters equipped with B&K Type 4188 0.5-inch microphones. The 28-hour monitoring period encompassed one night beginning at 4 p.m. on Wednesday, April 3rd and ending at 8 p.m. on Thursday, April 4th, 2002. Noise level data were recorded in terms of 10-minute L_{eq}, L_{10}, and L_{90}. To ensure the accuracy of the measurements, the sound level meter was calibrated prior to use with a B&K Type 4231 acoustical calibrator. Short term (10-minute) spot measurements were conducted using a Larson Davis System

824, which was calibrated with a Larson Davis CAL200. All equipment used in the survey complies with the requirements of the American National Standards Institute (ANSI) and the International Electrotechnical Commission (IEC) for Type 1 precision sound level measurement instrumentation. In all cases, the microphones were placed at a position of about 5 feet above local ground elevation.

Weather conditions were conducive to noise measurement and generally consisted of clear daytime skies, moderate temperatures, and an intermittent slight breeze.

The nighttime (10 p.m. – 7 a.m.) average L90 was approximately 32 dBA. Tables 2.5-2 and 2.5-3 present the hourly summary and spot measurement results respectively.

TABLE 2.5-2
Summary of Hourly Results at M2 – Winters (dBA)

Time	Leq	L10	L90
5:00 PM	51	41	33
6:00 PM	52	46	33
7:00 PM	55	48	34
8:00 PM	48	39	34
9:00 PM	46	39	35
10:00 PM	38	35	32
11:00 PM	35	37	33
12:00 AM	35	36	34
1:00 AM	33	34	32
2:00 AM	32	33	31
3:00 AM	32	32	31
4:00 AM	32	33	31
5:00 AM	32	33	31
6:00 AM	55	43	32
7:00 AM	47	47	32
8:00 AM	51	43	32
9:00 AM	55	48	31
10:00 AM	51	44	32
11:00 AM	46	44	31
12:00 PM	50	41	31
1:00 PM	55	44	31
2:00 PM	54	46	31
3:00 PM	47	40	32
4:00 PM	48	45	32
5:00 PM	54	47	33
6:00 PM	49	44	34
7:00 PM	55	46	32
8:00 PM	54	45	30

TABLE 2.5-3
Short-term Measurement Results – M2 Winters (dBA)

Date	Time	Duration	Leq	L1	L5	L50	L90	L95	L99
04-Apr-2002	6:21	10:00.0	41	50	43	35	32	31	31
04-Apr-2002	19:56	10:00.0	28	33	30	28	27	27	27

2.5.1.3 Environmental Consequences

Noise will be produced at the site during both the construction and operation phases of the project. Potential noise impacts from both activities are asses in this section.

2.5.1.3.1 Significance Criteria

The criteria will be the same as presented in Section 8.5.4.1 of the AFC with the exception that the applicable local standards for Yolo County are summarized in Section 2.5.1.1.1, above.

2.5.1.3.2 Construction Noise Impacts

Worker exposure levels during the construction of the gas compressor station will vary depending on the type of activity and the proximity of workers to the noise-generating activities. Hearing protection will be available for workers and visitors to use as needed throughout the duration of the construction period. As stated in Section 8.5.4.2.1 of the AFC, a hearing protection plan, which complies with Cal-OSHA requirements, will be incorporated into the Health and Safety Plan for both the plant site and the linear facilities.

Table 2.5-4 presents noise levels from common construction equipment that may be used during the construction of the compressor station. Given the agricultural nature of the area, it is likely that the noise levels experienced during the construction phase will not exceed levels that commonly occur during harvest or planting seasons.

2.5.1.3.3 Operational Noise Impacts

Since there are no permanent or semi-permanent workstations located near the gas compressor, no worker's time-weighted average exposure to noise should approach the level allowable under OSHA guidelines. Nevertheless, signs requiring the use of hearing protection devices will be posted in all areas where noise levels commonly exceed 85 dBA, such as inside acoustical enclosures.

The Applicant will construct acoustical barriers or acoustical enclosures to ensure that the noise from normal operation of the gas compressor does not exceed 37 dBA at the nearest residence. Such a level results in a less than 5 dBA increase in the average L90 and complies with local guidelines.

TABLE 2.5-4
Noise Levels from Common Construction Equipment and Resultant Receptor Noise Levels

Construction Equipment	Typical Sound Pressure Level at 50 feet (dBA)	Expected Sound Pressure Level at M2, 800 feet (dBA)
Dozer (250-700 hp)	88	64
Front End Loader (6-15 cu. yds.)	88	64
Trucks (200-400 hp)	86	62
Grader (13 to 16 ft. blade)	85	61
Shovels (2-5 cu. yds.)	84	60
Portable Generators (50-200 kW)	84	60
Derrick Crane (11-20 tons)	83	59
Mobile Crane (11-20 tons)	83	59
Concrete Pumps (30-150 cu. yds.)	81	57
Tractor (3/4 to 2 cu. yds.)	80	56
Unquieted Paving Breaker	80	56
Quieted Paving Breaker	73	49

2.5.2 Valve #190 Crosstie Compressor Station

The following section addresses potential noise impacts from the Valve #190 Crosstie Compressor Station located near the Sacrament Regional Wastewater Treatment Plant. The site is located within the newly formed City of Elk Grove, which, for the time being, has adopted the Sacramento County noise regulations.

2.5.2.1 Laws, Ordinances, Regulations and Standards

Given that the City of Elk Grove has adopted Sacramento County's noise LORS, the LORS for this compressor station are the same as those presented in Section 8.5.2 of the AFC. Table 2.5-5 is a summary of applicable local regulations that apply to noise generated by the Valve #190 Crosstie Compressor Station.

The most restrictive design standard applicable to Valve #190 Crosstie Compressor Station is the 45 dBA L50 residential nighttime standard set forth in the general plan.

In addition to the above standards, the County has developed the following guidelines for Land Use Compatibility for Community Noise Environments, Table 2.5-6. This table is to be used to determine the necessity for an acoustical study based on the exterior, premitigation noise exposure level. Any mitigation must achieve noise levels that are in compliance with the policies of the Noise Element.

TABLE 2.5-5
Summary of Applicable Local Noise Regulations, County of Sacramento

Regulatory Body	General Standard
Noise Element Sacramento County General Plan December 1993 (rev. 5/97)	**Policy NO-2:** Noise levels shall not exceed the levels specified below at the property line of any affected residentially designated lands or residential land use situated in unincorporated areas.

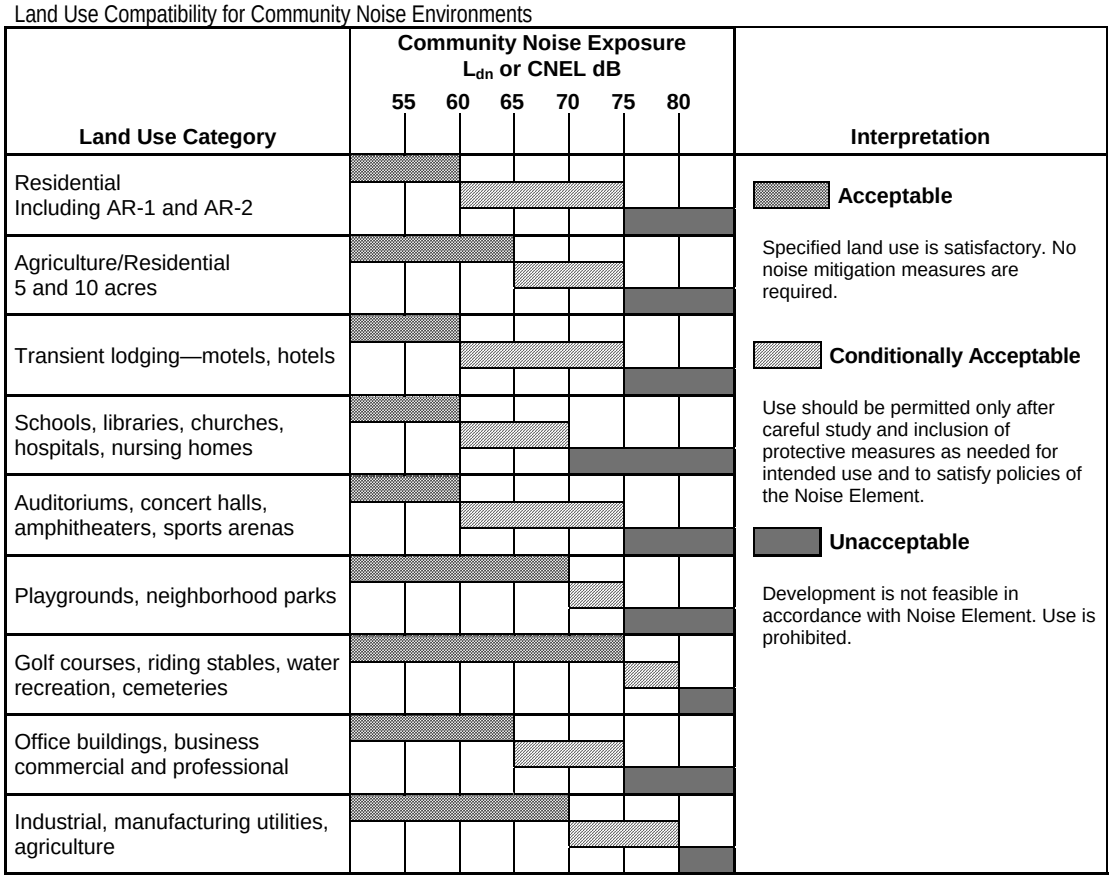
Statistic	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
L50	50	45
Lmax	70	65

The above levels shall be decreased by 5 dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These levels do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

Policy NO-3: Where noise sources are likely to produce noise levels exceeding the performance standards above at existing or planned residential uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Source: County of Sacramento, 1993

TABLE 2.5-6
Land Use Compatibility for Community Noise Environments



Noise Source: All noise except airport
Source: County of Sacramento, 1993.

2.5.2.2 Affected Environment

As stated in Section 1.1.2.1, the Valve #190 Crosstie Compressor Station will be installed at the existing inter-tie, which is located within the Sacramento Regional Wastewater Treatment Plant (SRWWTP) buffer lands, north of the Carson Cogeneration Plant (refer to Figure 1-2). The nearest residences are about 800 to 900 feet away. Sources of environmental noise in the vicinity of the site primarily include local and distant vehicular traffic, occasional near-by rail traffic, and noise associated with the SRWWTP and Carson Cogeneration Plant.

2.5.2.2.1 Ambient Noise Survey

Measurements were made at M3, on the northern side of Dwight Road and approximately 300 feet east of the railroad tracks, and at M4, in the residential area north of the site on the corner of Sea Forrest Way and McNamara Way (see Figures 2.5-2 and 2.5–3). Measurements were made with the same make and model of equipment specified in Section 2.5.1.2.1, above. A secure and discrete location in the vicinity of M4 was not available; therefore, the continuous monitor was set at M3 and several series of spot measurements were made at M4.

The 30-hour continuous monitoring period at M3 encompassed two nights beginning at 10 p.m. on Wednesday, April 3rd and ending at 4 a.m. on Friday, April 5th, 2002. The 10 p.m. to 5 a.m. average L90 for the first night was 42 dBA and the 10 p.m. to 4 a.m. average L90 for the second night was 39 dBA. The minimum hourly L90 was 36 dBA and the minimum 10-minute L90 was 33 dBA.

According to the continuous monitoring results at M3, the short-term noise measurements that were collected at M4 were taken during the quietest periods of the night. The 30-minute attend measurement between the hours of 4 and 5 a.m. the night of April 4th resulted in an average L90 of 39 dBA. The hour-long attended measurement between the hours of 3 and 4 a.m. the night of April 5th resulted in an average L90 of 32 dBA. The average of these two measurements is 35.5 dBA.

Tables 2.5-7 and 2.5-8 summarize the hourly and short-term monitoring results, respectively.

TABLE 2.5-7
Summary of Hourly Results at M3 – Valve #190 (dBA)

Time	Leq (hr)	L10 (hr)	L90 (hr)
11:00 PM	68	62	43
12:00 AM	64	48	42
1:00 AM	43	44	41
2:00 AM	42	44	41
3:00 AM	58	49	41
4:00 AM	65	60	41
5:00 AM	50	48	45
6:00 AM	63	64	48
7:00 AM	51	52	48
8:00 AM	49	51	41
9:00 AM	66	52	39
10:00 AM	61	63	38

TABLE 2.5-7
Summary of Hourly Results at M3 – Valve #190 (dBA)

Time	Leq (hr)	L10 (hr)	L90 (hr)
11:00 AM	53	50	39
12:00 PM	62	48	41
1:00 PM	61	56	42
2:00 PM	64	59	39
3:00 PM	64	65	42
4:00 PM	48	51	42
5:00 PM	66	66	43
6:00 PM	66	54	43
7:00 PM	50	52	44
8:00 PM	46	47	44
9:00 PM	53	52	44
10:00 PM	46	47	44
11:00 PM	44	45	42
12:00 AM	61	61	42
1:00 AM	65	54	40
2:00 AM	40	41	38
3:00 AM	56	43	36
4:00 AM	46	40	37

TABLE 2.5-8
Summary of Short Term Measurements at M4 – Valve #190 (dBA)

Date	Time	Duration	Leq	L1	L5	L50	L90	L95	L99
04-Apr-02	4:30:00	10:00.0	41	45	44	41	38	38	37
04-Apr-02	4:40:00	10:00.0	41	44	43	41	40	39	39
04-Apr-02	4:50:00	10:00.0	45	57	50	41	39	39	39
					AVERAGE		**39**		
05-Apr-2002	3:20:00	10:00.0	43	57	50	33	32	32	32
05-Apr-2002	3:30:00	10:00.0	41	54	39	32	31	30	29
05-Apr-2002	3:40:00	10:00.0	32	37	33	31	30	30	29
05-Apr-2002	3:50:00	10:00.0	33	38	36	32	30	30	29
05-Apr-2002	4:00:00	10:00.0	33	36	35	33	31	31	30
05-Apr-2002	4:10:00	10:00.0	37	40	39	36	34	33	32
					AVERAGE		**32**		

2.5.2.3 Environmental Consequences

Noise will be produced at the site during both the construction and operation phases of the project. Potential noise impacts from both activities are asses in this section.

2.5.2.3.1 Significance Criteria

The criteria will be the same as presented in Section 8.5.4.1 of the AFC.

2.5.2.3.2 Construction Noise Impacts

Worker exposure levels during the construction of the gas compressor station will vary depending on the type of activity and the proximity of workers to the noise-generating activities. Hearing protection will be available for workers and visitors to use as needed throughout the duration of the construction period. As stated in Section 8.5.4.2.1 of the AFC, a hearing protection plan, which complies with Cal-OSHA requirements, will be incorporated into the Health and Safety Plan for both the plant site and the linear facilities.

Table 2.5-9 presents noise levels from common construction equipment that may be utilized during the construction of the compressor station. Given the urban nature of the area, it is likely that the noise levels experienced during the construction phase will not exceed levels that commonly occur during the day. The short duration of the construction activities also limit the impact.

TABLE 2.5-9
Noise Levels from Common Construction Equipment and Resultant Receptor Noise Levels

Construction Equipment	Typical Sound Pressure Level at 50 feet (dBA)	Expected Sound Pressure Level at M4, 2,500 feet (dBA)
Dozer (250-700 hp)	88	54
Front End Loader (6-15 cu. Yds.)	88	54
Trucks (200-400 hp)	86	52
Grader (13 to 16 ft. blade)	85	51
Shovels (2-5 cu. yds.)	84	50
Portable Generators (50-200 kW)	84	50
Derrick Crane (11-20 tons)	83	49
Mobile Crane (11-20 tons)	83	49
Concrete Pumps (30-150 cu. yds.)	81	47
Tractor (3/4 to 2 cu. yds.)	80	46
Unquieted Paving Breaker	80	46
Quieted Paving Breaker	73	39

2.5.2.3.3 Operational Noise Impacts

Since there are no permanent or semi-permanent workstations located near the gas compressor, no worker's time-weighted average exposure to noise should approach the level allowable under OSHA guidelines. Nevertheless, signs requiring the use of hearing protection devices will be posted in all areas where noise levels commonly exceed 85 dBA, such as inside acoustical enclosures.

The Applicant will construct acoustical barriers or acoustical enclosures to ensure that the noise from normal operation of the gas compressor does not exceed 40 dBA at the nearest residence, M4. Such a level results in a less than 5 dBA increase in the average recorded L90 at M4 and complies with local guidelines.

2.5.3 Interconnection and Valve Stations

To provide a baseline example, noise levels at measurement location M2 is located approximately 0.1 mile from the existing Winters inter-tie station (which has significant above ground piping and valving), reported L90 levels as low as 27 dBA. The proposed interconnection station near the Carson Cogeneration facility is more than 0.5 mile from the nearest residences on Dwight Road. Only considering geometric divergence, a distance of 0.2 miles from the intertie station would result in a noise level of 21 dBA – far below the ambient levels currently experienced in the area.

As stated in Section 2.4.3, the valve stations will be located in agricultural areas and according to Section 1.1.2, the primary equipment associated with the valve stations will be located below ground. Therefore, no increase in ambient noise level is anticipated.

2.6 Public Health

Since there would be no additional air quality impacts, except for some minor short-term construction impacts, the addition of the compressor stations would not create a significant adverse public health impact.

2.7 Worker Health and Safety

Construction of the compressor stations would result in a short-term increase in construction efforts. The combined effect of this change in construction would generate a minor increase in construction. However, by complying with the plans described in the AFC, there would not be a significant impact to Worker Health and Safety.

2.8 Socioeconomics

Impacts from the construction of the valve stations were included in the AFC as part of the analysis for construction of the gas line. The construction of the compressor stations will create a few short-term temporary construction jobs. The construction period would only last a few weeks. Therefore, impacts to the local economy, although positive, would be negligible in size. The addition of the two compressor stations, as part of the Phase 2 workforce, would not create a perceptible change in the workforce size or potential impacts, since the work duration is short and would be done at locations removed from the plant site; thus, reducing the possibility of impacts to schools or other public services. Therefore, adverse impacts to schools, housing or public services would not occur. In addition, beneficial impacts to the local economy would be imperceptible due the limited size of this work effort.

2.9 Agriculture and Soils

The Valve #190 Crosstie Compressor Station is located south of Sacramento near areas of urban or suburban development. The land on which it will sit has been dedicated as a disposal area, and is currently grazing land. The valve #190 station sits entirely in an area

mapped as Galt Clay, a level alluvial soils found in cut areas or low terraces. Galt clays are classified as non-prime agriculture soils, and pose little or no water erosion hazard. As with any construction activity, soils excavated or stockpile during construction of the valve #190 station should be covered with straw or geotextile to minimize erosion losses during storm events. Although the soil does not pose a high erosion hazard, its fine texture would allow suspension of particles in runoff. Use of temporary erosion control, including silt fences or straw bales, is recommended.

The Winters Compressor Station will be located in a previously constructed site, already dedicated to a connection between a SMUD and PG&E pipeline. However, construction of the compressor station may require expansion of the fenceline of this area. Currently, the site is buffered from adjacent almond orchards and pasture land by a graveled area outside the fenceline of the compressor station. This area is already disturbed and removed from agricultural production, and would therefore not result in loss of agricultural land.

The soil at the Winters Compressor Station is mapped as a Tehama loam, although disturbance (e.g., graveling, vehicle traffic / parking, construction) around the existing station may have altered or compacted the soil. The Tehama loam is slowly permeable, presents a slight water erosion hazard. Disturbance of this soil during modification of the existing compressor station is likely to be minimal, particularly as the area immediately outside the fence is compacted, graveled soil. Erosion minimization may be achieved using the same practices prescribed for the Valve #190 Crosstie. Reduction of any dust emissions will also be necessary to maintain the health of the nearby almond trees. This can be achieved by covering stockpiled soils and watering exposed surfaces during construction. Return of the gravel to disturbed areas will be sufficient to minimize post-construction erosion.

2.10 Traffic and Transportation

Construction of the Winters compressor station and valve stations will not result in a significant increase in the number of vehicles along the roadway surrounding the stations. Due to the small construction size and short construction duration (less than 2 weeks), there would not be any need to reroute trips. Since the Valve #190 Crosstie Compressor Station is located on the Sacramento Regional Wastewater Treatment Plant buffer lands, there are no associated traffic impacts.

If the construction of the Winters compressor station or the valve stations would require temporary lane closures, a traffic control plan during construction will be needed to mitigate these minimal traffic disturbances. Overall, since there would be no traffic impacts, except for some minor short-term construction impacts, the addition of the compressor stations would not create a significant adverse traffic impact.

2.11 Visual Resources

Construction of the two gas compressor stations, three valve stations, and interconnection station would cause temporary visual impacts due to the presence of equipment, materials, and construction personnel. As discussed in Section 8.11 of the AFC, construction activities would occur for only a short period in any given location. Due to the short-term nature of project construction and SMUD's commitment to restoring areas disturbed by construction to pre-construction conditions, no substantial visual degradation of the areas surrounding

the stations would occur. Potential visual impacts associated with project construction are considered less than significant.

The significance of the long-term impact on visual resources from the presence of these project facilities would depend on the degree to which the viewshed is altered or the facility contrasts substantially with the landscape.

The gas compressor station at the Winters site would be surrounded by an acoustical structure or block wall within the existing inter-tie station that is surrounded by a cyclone fence. Orchards are adjacent to the site, and the nearest residence is about 0.1 mile away. Because the inter-tie station is already established at the site, and viewers are accustomed to its presence, the addition of the gas compressor station within that fenced area would not significantly change the view of that landscape.

The gas compressor station at the valve #190 crosstie site would be surrounded by an acoustical or block wall installed within a cyclone-fenced area on wastewater treatment plant buffer lands. The nearest sensitive receptors (a residential area) are about 800 to 900 feet away to the north. Similar to the station proposed at the Winters site, because the inter-tie station is already established and viewers are accustomed to its presence, the addition of the gas compressor station within that fenced area would not significantly change the view of that landscape.

At the interconnection and valve stations, all of the mainline valves would be underground. The only items that would be visible would be the 3.5-foot-high valve extensions, an 8-foot-high blow off stack, and a Remote Terminal Unit (which would be enclosed in a structure). The stations would be enclosed by a 6-foot-high cyclone fence with wood slats and topped with barbed wire.

The enclosed interconnection station would be located in the agricultural field on the south side of Glacier Way across from the Carson Cogeneration facility. A pipeline, irrigation equipment, and power poles are located nearby, and the area was previously in agricultural use. The area is a disturbed landscape and sensitive receptors are located about 4,000 feet south on Dwight Road. The development of the station would introduce another facility into the landscape. However, due to its distance from the residential area, its 6-foot high fence, and the existing Carson Cogeneration facility and related transmission lines, views from the residences would not be affected by the presence of the interconnection station.

The three valve stations would be located in an area that is considered rural residential (residences that have several acres of land surrounding them). Development in the area primarily consists of rural residences with vast expanses of open space used for pasture or other agricultural activities. Development of the enclosed valve stations would introduce new facilities into the landscape, but would affect few viewers and, therefore, would not create a substantial visual impact.

2.12 Hazardous Materials Handling

Construction of the compressor stations will not result in a significant increase in the use of hazardous materials during construction. Due to the small size of this construction effort, there would not be a need for equipment refueling and maintenance at the construction site; thereby, eliminating the possibility that hazardous materials generated during construction would come from that source. Thus, there would not be the potential for material spills and

the resulting impacts on the environment and the construction of the compressor stations would not result in a significant hazardous materials handling impact.

Because the compressor and valve stations are electrically operated, their operation will not require storage or handling of any hazardous materials in the form of fuels. Small quantities of lubricating oil will be used, but these will not be stored at the stations. Operation of the compressor stations is not anticipated to result in a significant impact from hazardous materials handling.

2.13 Waste Management

The construction of the two compressor stations may result in a slight increase in the amount of soil excavated for installation of the compressor and valve foundations. The excavated soil will need to be shipped from the construction area for use as clean fill or disposal in a landfill. Therefore, the small quantity of spoil that would be produced will not represent a significant impact on waste management. Construction of the interconnection and valve stations will also require excavation of soils.

The compressor stations will be located at existing inter-tie stations in agricultural or open space areas so it is not likely that the excavated soils will contain hazardous materials. The pipeline interconnection will be in an agricultural area that has been disturbed by previous construction activities. It will be located in the vicinity of two sites identified by a database search performed by VISTA Info in July 2001 (see AFC Appendix 8.13A). These sites are at the Carson Cogeneration Project located at 8580 Laguna Station Road and the Sacramento Regional WWTP at 8521 Laguna Station Road. According to the results of the database search, there is a closed solid waste landfill that was used for sludge disposal at the treatment plant (i.e., at the site of the Carson Cogeneration Project, and a leaking underground storage tank site that was closed by Sacramento County in 1986. The leak was gasoline from piping and it impacted the soil only, not the groundwater. Construction of the interconnection will not occur near the former landfill or spill site. The Carson Cogeneration Project site was listed in the database search as the site of an air facility system. No spills or leaks have been reported at that site, according to the database search.

Valve Station 1 will be located on the north side of Core Road and westside of Bruceville Road. The only sites identified by the VISTAinfo search within 0.5 mile of Valve Station 1 were water supply wells. Information provided by the VISTAinfo search will be confirmed with Sacramento County prior to commencement of construction. In addition, a Construction Waste Management Plan will be developed for use by the construction contractor in the event that potentially contaminated soil is encountered during construction of the CPP site or the linear facilities.

Valve Station 2 will occupy the northwest corner of Arno and Valensin Road. This station will be approximately 0.5 mile south of a leaking underground tank site identified on the VISTAinfo search at Valensin Ranch, 11653 Valensin Ranch Road. In addition, the search identified a water supply well approximately 0.25 mile east of the site. Excavation at Valve Station 2 will be minimal, as it will occur only for the purpose of burying the valves. The valve stems will be exposed above grade. The pipeline blowdown stack and control equipment will also be above grade. Construction of this facility is not likely to encounter contaminated soil from the tank leak at Valensin Ranch. However, as a precaution, information provided by the VISTAinfo search will be verified with Sacramento County prior to construction.

The location of the third valve station will be the southwest corner of Valensin and Alta Mesa Roads. This site is within 0.5 mile of two permitted underground storage tank sites and two water wells. Neither of the tank sites had reported leaks as of the date of the VISTAinfo report. This information will be confirmed with Sacramento County before beginning construction.

Because the compressor and valve stations are electrically operated, their operation will not generate significant quantities of solid or liquid waste. Small amounts of lubricating oils and oil filters will be generated during routine maintenance activities. In addition, liquid wastes collected from the pipeline blowdown stacks at the valve stations will be generated periodically. These wastes will not be stored at the stations, but will be removed by maintenance personnel immediately upon generation and taken to a centralized waste storage area at the CPP site.

2.14 Water Resources

Construction of the compressor stations would not require the substantial use of water, water would not be required for their operation, and construction would not obstruct any flood way or waterway. Therefore there would not be a significant impact to water resources from this activity.

2.15 Geologic Hazards and Resources

The construction of the compressor stations will only require a fairly shallow excavation in a limited area into previously disturbed soils. No significant impact to geologic resources (if present) are anticipated. All structures must be constructed to International Building Codes standards for seismic acceleration of up to 0.5g (Mualchin, 1996). Any liquefiable or expansive soils identified during construction can be mitigated, if necessary, by over-excavating and replacing with non-expansive and liquefiable soil mixtures. Therefore, this action would not result in a significant adverse geologic impact.

Reference: Mualchin, L. 1996. A Technical Report to Accompany the CALTRANS California Seismic Hazard Map. Prepared for CALTRANS by the Office of Earthquake Engineering. July

2.16 Paleontological Resources

Paleontological impacts from construction of the interconnection and valve stations were addressed in the AFC as part of the gas line analysis. As stated previously in Section 2.15, the compressor stations will only require shallow excavations for connection to the existing gas lines. The area is already highly disturbed as a result of the existing equipment. Therefore, paleontological sensitivity is low and construction of these features would not cause significant adverse impacts.

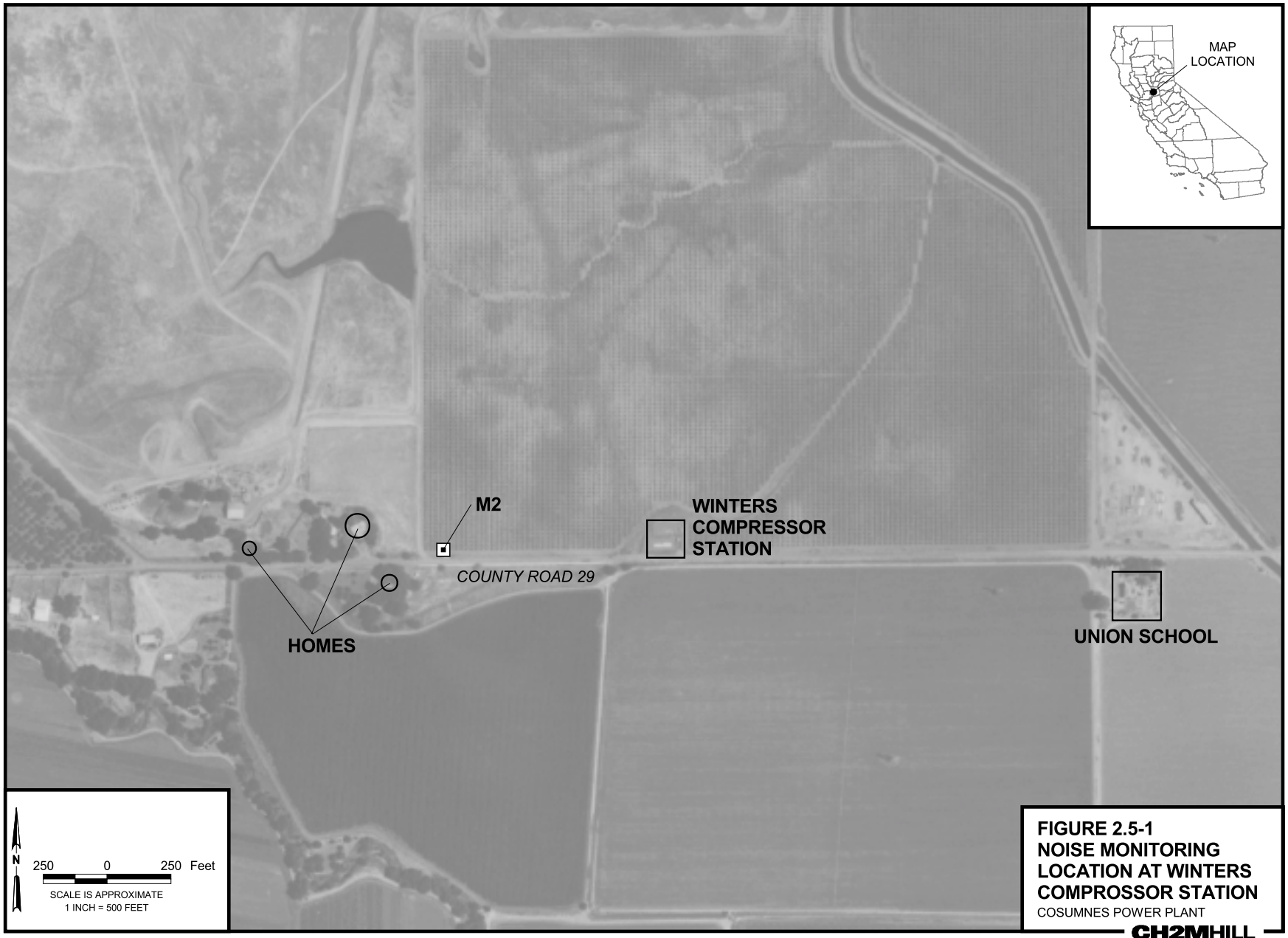


FIGURE 2.5-1
NOISE MONITORING LOCATION AT WINTERS COMPROSSOR STATION
COSUMNES POWER PLANT

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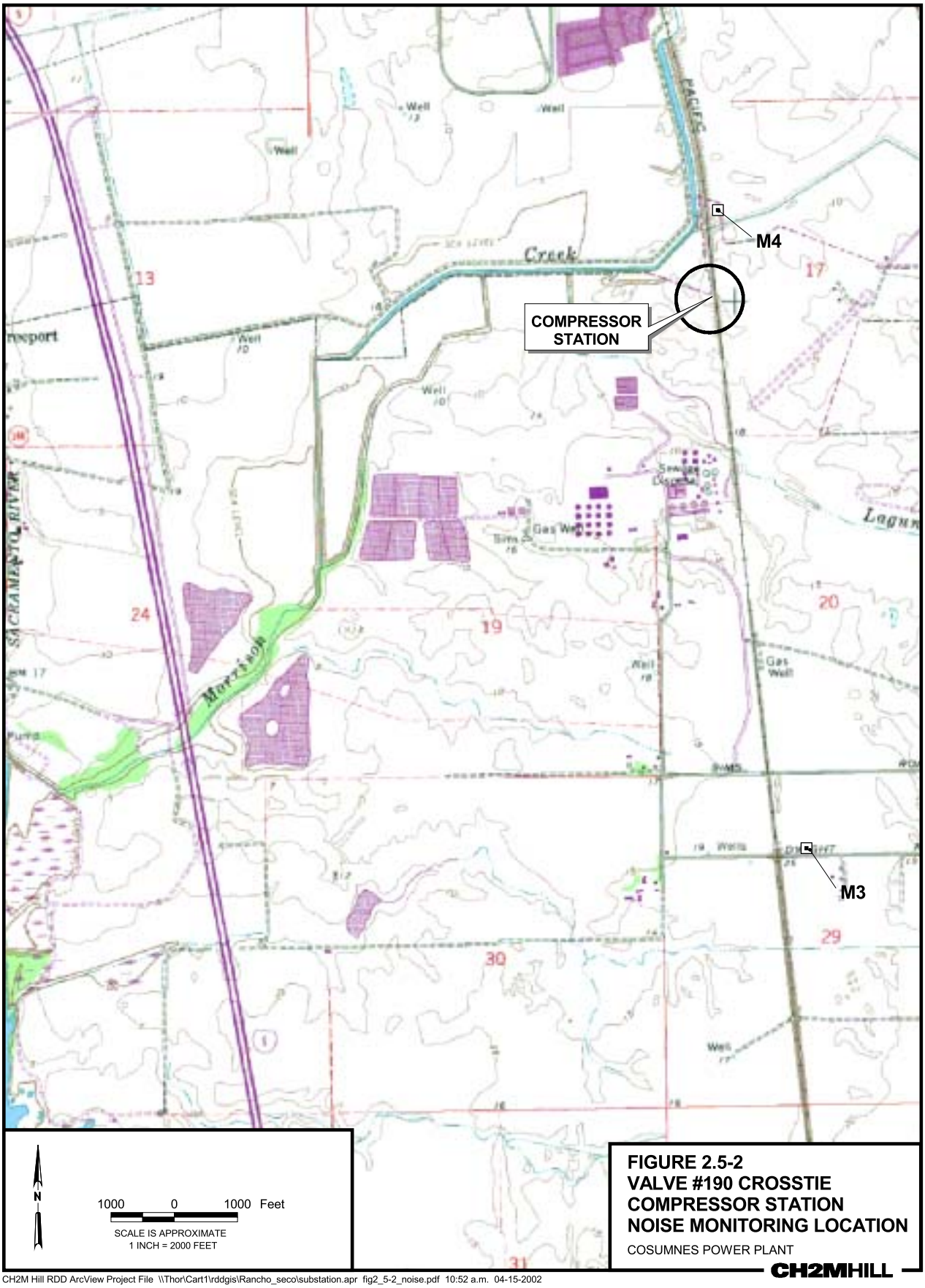

FIGURE 2.5-2
VALVE #190 CROSSTIE
COMPRESSOR STATION
NOISE MONITORING LOCATION

COSUMNES POWER PLANT

CH2MHILL

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FIGURE 2.5-3
VALVE #190 COMPRESSOR STATION
NOISE MONITORING LOCATION M4
COSUMNES POWER PLANT

CH2MHILL

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3.0 ANALYSIS OF CONSTRUCTION ACCESS ROAD

This section addresses potential impacts resulting from the construction of the construction access road. In addition, mitigation measures are included, if necessary, to reduce the nature or type of impacts below the level of significance.

3.1 Air Quality

Building the construction access road will result in a very minor temporary and finite increase in the production of criteria and non-criteria air pollutants in the form of fugitive dust and tailpipe emissions from construction equipment. As these elements of the project construction are expected to span a few weeks in total, the associated additional air emissions would not be significant due to the limited nature of the construction. Fugitive dust emissions will be minimized by employing dust suppression measures. Tail-pipe emissions will be minimized by limiting the amount of engine idling, maintaining construction equipment within manufacturer's specifications, and limiting the number of construction machines used.

3.2 Biological Resources

3.2.1 Biological Survey

The construction access road would be on existing paved roads to approximately 100 yards east of the existing park entrance. From there a new road would be constructed along the alignment of an existing dirt track that parallels the fenceline. The area was generally surveyed as part of the Rancho Seco Master Plan that was prepared in 1994, and was specifically surveyed by a CH2M HILL biologist using meandering transect method on March 20, 2002. The habitat crossed by the road is very similar to that described for the project site and surrounding area. Annual grasslands dominated by mediterranean grasses and herbs cover gentle rolling slopes and drainages. Annual grassland is characterized by exotic mediterranean grasses such as brome grass, oats, crabgrass and herbaceous plants such as dandelion, starthistle and filaree.

There are three small drainages that cross the proposed access road, each pooling to varying degrees on and adjacent to the road. In early summer parts of these swales support sparse wild rye, spike rush, coyote thistle, pepper grass, curly dock and velvet grass. In one drainage there is some habitat deep enough to support small amounts of water primrose and aquatic buttercup. There is not enough water to support cattails or bulrushes. The access road joins Clay East Road near the east end, and therefore, does not cross Clay Creek.

These wetland habitats are suitable to support Pacific treefrogs and potentially help amphibians such as tiger salamanders to move across the landscape, but do not have permanent water and dense cover that would support fishes or highly aquatic species such as giant garter snake. Fairy shrimp and tadpole shrimp are known from pools in the region, but have not been reported from the wetlands crossing the access road.

Vernal pool species that could potentially occur along the access road include Boggs Lake hedge hyssop, legenere, pincushion navarretia, slender Orcutt grass and Sacramento orcutt grass. Several of these are known from vernal pools in the south Sacramento area, although

there are no known records of these species near the access road. Additional field surveys are planned for Spring of 2002 to confirm this.

Wildlife and plant species that could occur along the access road are the same as those described in the AFC. Sensitive species would include the vernal pool fairy shrimp and tadpole shrimp, tiger salamander, burrowing owl, Swainsons hawk, tricolored blackbird, and western spadefoot as noted in the AFC. The same precautions proposed there should be taken to avoid, minimize and, as appropriate, compensate for impacts to these species if they occur. Additional field surveys of the site will also be made to confirm whether any of these species occur along the access road. Habitat is not suitable along the access road to support valley elderberry longhorn beetle, giant garter snake, or western pond turtle.

3.2.2 Standards of Significance

As noted in the AFC, impacts on biological resources are considered significant if one or more of the following conditions could result from implementation of the proposed project:

- Substantial effect, reduction in numbers, restricted range, or loss of habitat for a population of a state- or federally-listed threatened or endangered species;

  The proposed access road would not substantially effect, reduce in number or restrict the range of any listed threatened or endangered species.

- Substantial effect, reduction in numbers, restricted range, or loss of habitat for a population of special-status species, including fully-protected, candidate proposed for listing, species of special concern, and certain CNPS list designation;

  The proposed access road would not substantially effect, reduce in number or restrict the range of any special status or similarly listed species.

- Substantial interference with the movement of any resident or migratory fish or wildlife species;

  The proposed access road would not substantially interfere with the movement of any resident or migratory fish or wildlife species.

- Substantially diminish or reduce habitat for native fish, wildlife, or plants;

  The proposed access road would not substantially diminish or reduce habitat for native fish, wildlife or plants.

- Substantial disturbance of wetlands, marshes, riparian woodlands, and other wildlife habitat.

  The access road would disturb a small are of wetlands.

- Remove trees designate as heritage or significant under County of local ordinances.

  There are no trees along the proposed access road.

The proposed access road would contribute incrementally to the cumulative loss of open space and grasslands in the region. Annual grasslands is a relatively widespread and common habitat type in California.

Because the impacts of the access road affect the same type of habitat and same general locality as the project site, it would be reasonable to implement similar measures to avoid and reduce adverse impacts and combine the affected area with that of the project site.

Reference:

Sacramento Municipal Utility District (SMUD). 1994. Draft Environmental Impact Report for Rancho Seco Park Master Plan. January.

3.3 Cultural Resources

The access road will be located north of the east end of Clay East Road where the public road ends and private property begins. At the present time there is a barbwire fence line that extends from Clay East Road north approximately 3,200 feet to an existing paved access road. The east side of the fence line contains a bladed dirt road about 20 feet wide. Land use on the east side of the fence line consists of pasture. Land use on the west side of the fence line consists of a solar panel facility devoid of vegetation, and pasture.

A 400-foot-wide access road corridor was surveyed on April 5, 2002, by James Sharpe (CH2M HILL), who inspected both sides of an existing fence line that bisects the road corridor (200 feet wide on each side of the fence line). Both sides of the fence line (east / west) were surveyed using straight line parallel transects 30 meters apart. Total area surveyed was 200 feet on each side of the fence line. Vegetation was heavy with visibility ranging from 0-75 percent. Soils contained small subangular gravels. Numerous rodent backdirt holes were inspected for traces of subsurface archaeological deposits. The access road survey resulted in negative findings; i.e., no cultural resource sites are present.

3.4 Land Use

The construction access road is located entirely on SMUD property and would replace an existing dirt road. Construction workers exit Twin Cities Road and would use the entrance road to Rancho Seco Park, then turn south along the new construction access road for about 0.5 mile to the intersection with Clay East Road, then turn west to the plant site. The new two-lane portion of this road will replace an existing dirt road. Use of this road will provide a benefit to the local area by allowing construction traffic to avoid residential development on Clay East Road. The route is designated for Public / Quasi-Public use, with a Resource Conservation Area overlay, and is zoned AG-80.

Construction of the access road would be consistent with the existing land use. The construction period of the road would be of short duration (one to two months) and the workforce required to build the road would be relatively small compared to the construction workforce of the power plant.

During construction of phases 1 and 2 of the CPP plant, the size of the construction workforce would average 170 workers with peak being estimated at 328 workers. Due to the size of the construction workforce, some interference may result between construction-related traffic and users of the Rancho Seco Park. Historically, the primary use of Rancho Seco Park occurs during the weekends. Construction workforce will use the access road in the early morning and late afternoon hours during the weekdays. Consequently, construction-related traffic would not significantly affect park users.

3.5 Noise

The construction access road is not located near any sensitive receptors. Short-term temporary construction noise is anticipated during the 2-month construction period. Once construction is complete, the noise levels from traffic on the west access would not be significant. Once construction of the plant is completed, use of the construction access road would be either terminated or significantly reduced.

3.6 Public Health

Since there would be no additional air quality impacts, except for some minor short-term construction impacts, the addition of the construction access road would not create a significant adverse public health impact.

3.7 Worker Health and Safety

Construction of the access road would result in a short-term construction effort. The combined effect of this change in construction would generate a minor cumulative increase in construction. However, by complying with the plans described in the AFC, there would not be a significant impact to Worker Health and Safety.

3.8 Socioeconomics

Building the construction access road will create a few short-term temporary construction jobs. The construction period would only last one to two months. Therefore, impacts to the local economy, although positive, would be negligible in size. The addition of the access road would be completed by the time that site grading is completed. Due to the few workers required and the timing at the first stages of project construction, it would not create a perceptible change in the overall workforce size, peak workforce or potential impacts. Therefore, adverse impacts to schools, housing or public services would not occur. In addition, beneficial impacts to the local economy would occur, but would be imperceptible due the limited size of this work effort.

3.9 Agriculture and Soils

Addition of a construction access road will result in additional disturbance of two soil types, including the Corning Complex and Redding Gravelly Loam, that largely comprise the power plant site. Both of these soil types are level terrace soils poorly suited to agricultural development. Typical use of these soils in the vicinity of the Cosumnes Power Plant is grazing land. The farmland classification is grazing land.

As with other soils at the power plant site and along the gas pipeline, typical best management practices will be necessary to minimize erosive losses during construction. Water erosion hazard is considered high on these soils, most likely due to their gravelly texture and consequent lack of cohesiveness.

Erosion control may include temporary covering on stockpiled soils excavated from the construction site with straw, geotextile blankets or other erosion control materials, use of silt fences to intercept soils lost in runoff during rain events, and replacement of soils following construction. Revegetation (e.g., seeding with aggressive grass species) of soils following

construction will help to minimize future erosive losses. Monitoring of sensitive receptors during and after construction will be necessary to ensure that sediment loss is not adversely affecting the surrounding habitat.

3.10 Traffic and Transportation

3.10.1 Construction Phase Impacts

Rerouting construction workers to use the entrance road to Rancho Seco Park from Twin Cities Road will eliminate the safety concern of construction worker traffic and heavy vehicles mixing with residential and specifically school-related traffic along Clay East Road.

Travelling east along Twin Cities Road, construction vehicles will continue east past Clay East Road for approximately 3.5 miles to the Rancho Seco Park entrance. Within the SMUD property, construction workers will immediately turn south to proceed along the new construction access road for about ½ mile to its intersection with Clay East Road, then turn west and proceed briefly along this portion of Clay East Road to the plant site. The new 2-lane portion of this road will replace an existing dirt road that runs adjacent to a barbwire fence line. During construction, the traffic impact along Twin Cities Road, east of Clay East Road, will be similar to the impacts described in the AFC for the adjacent sections of Twin Cities Road, and therefore, are at a level of insignificance.

During construction of the CPP plant, the size of the construction workforce would average 170 workers with peak being estimated at 328 workers. Due to the number of construction workers, some interference may result between construction-related traffic and users of the Rancho Seco Park. The Rancho Seco Park is open year round from 7 a.m. to 6 p.m., and the construction workforce will use a short portion of the road to the park to connect to the construction access road (see Figure 1-8) during these hours of weekday operation. Historically, use of Rancho Seco Park occurs primarily on the weekends and because peak construction-related traffic will occur during the early morning and late afternoon on the weekdays, this reroute will not significantly interfere with the majority the park users.

Loads requiring the use of heavy-weighted construction vehicles will not use the construction access road; these loads would be transported by rail to the existing Rancho Seco rail spur located within the Rancho Seco Plant. This would eliminate any heavy-weighted vehicles from using state roadways.

3.10.2 Operations and Maintenance Phase Impacts

Once construction of the plant is completed, use of the construction access road would be either terminated or significantly reduced during the operations and maintenance phase.

3.10.3 Cumulative Impacts

With the available capacity and no other known proposed projects, the reroute of construction vehicles to the Rancho Seco Park would not incur any significant cumulative traffic impacts.

3.10.4 Mitigation Measures

If mitigation is necessary within Rancho Seco Park, monitoring of the traffic flow during the peak construction hours when vehicles enter and exit the Park is proposed to minimize any disturbance caused by the construction vehicles. This monitoring could include a flagger stationed at the Rancho Seco Park entrance and will be included as part of the traffic control plan.

3.11 Visual Resources

Access road construction would cause temporary visual impacts due to the presence of equipment, materials, and construction personnel. Construction activities would occur for only a short period at this location. Due to the short-term nature of project construction, no substantial visual degradation of the area would occur. Potential visual impacts associated with project construction are considered less than significant.

The significance of the long-term impact on visual resources from the presence of the construction access road would depend on the degree to which the viewshed is altered or the facility contrasts substantially with the landscape.

The proposed access road would be constructed through land owned by SMUD. At its northern terminus, it would connect to the road that leads to Rancho Seco Park and it would connect to eastern end of Clay East Road at its southern terminus. The nearest residence is the mobile home located at KOP 1. From this location the road could not be seen due to existing vegetation and the rolling terrain. From KOP 2, the road would be more than 1.5 miles away and would be imperceptible in the far-view. The presence of this paved road would introduce construction traffic in an area where traffic does not currently occur and would move it out of the residential areas. Thus, its presence would not significantly degrade the landscape.

3.12 Hazardous Materials Handling

Construction of the access road would use mainly nonhazardous materials. Fueling of construction vehicles would not be done along the access road itself, but would be accomplished at a dedicated construction vehicle fueling station located at the CPP site or laydown area. Asphalt paving of the road will require the temporary use of hazardous materials in the form of the asphalt paving materials themselves and paint for road striping. Once paving has been completed, these materials will be removed from the site.

The construction access road is not located near any sensitive receptors. The road will be entirely on SMUD property. It will not be constructed in the vicinity of residential areas on Clay East Road.

Operation of the construction access road will not require the use of hazardous materials. Therefore, there will be no significant impacts from hazardous materials during construction or operation of the road.

3.13 Waste Management

Generation of waste during construction of the road will be limited to soils and leftover construction materials, such as rock or asphalt. These wastes will be disposed of as nonhazardous waste or reused at the site as fill material.

Operation of the road will not generate any wastes.

3.14 Water Resources

The proposed access road construction would use a moderate amount of water for construction. This amount of water would not significantly affect other users or available supply.

The proposed access road crosses an area that is elevated above the regional floodplain and, therefore, would not cause measurable changes to the local flood capacity.

The proposed access road crosses three local ephemeral drainages. The road would need to be designed to convey these flows under the road (culverts). With culverts in place the access road would have no significant effect on these drainages.

3.15 Geologic Hazards and Resources

The construction of the access road will not affect geological resources as none were identified in the CPP site area. Geologic hazards will not affect the construction road as no active faults will be crossed and liquefiable or expansive soils were not identified in the CPP project area. Therefore, this action would not result in a significant adverse geologic impact.

3.16 Paleontological Resources

The location of the construction access road is within the area analyzed in Section 8.16 of the AFC (see also Confidential Figure 8.16-1). As stated in the AFC, construction of facilities in this area may result in significant adverse impacts to paleontological resources. Consequently, the paleontological mitigation measures proposed in the AFC would apply to the construction of the access road.

4.0 ANALYSIS OF TRANSMISSION CORRIDOR

This section addresses potential impacts resulting from the widening of the transmission corridor and construction of three additional transmission line towers. In addition, mitigation measures are included, if necessary, to reduce the nature or type of impacts below the level of significance.

4.1 Air Quality

Construction and conductoring of 3 additional transmission line towers will result in a very minor temporary and finite increase in the production of criteria and non-criteria air pollutants in the form of fugitive dust and tailpipe emissions from construction equipment. As these elements of the project construction are expected to span a few weeks in total, the associated additional air emissions would not be significant due to the limited nature of the construction. Fugitive dust emissions will be minimized by employing dust suppression measures. Tail-pipe emissions will be minimized by limiting the amount of engine idling, maintaining construction equipment within manufacturer's specifications, and limiting the number of construction machines used.

4.2 Biological Resources

The transmission corridor crosses at substantially the same location and habitats as described in the AFC. Specifically, the transmission corridor crosses annual grassland pasture, interspersed with seasonal wetlands described as degraded ponds. Transmission tower footings would be sited, if feasible to avoid the wetlands. However, because these pools are in poor condition, and depending on agreements of regulatory agencies, it may be desirable to fill and rebuild these degraded wetlands.

Biological resources on the transmission line corridor are the same as those described in the AFC. The size of the area that would be affected is approximately double that described in the AFC. Impacts would be both temporary and long-term, and feasible mitigation measures would reduce impacts from the transmission lines.

4.3 Cultural Resources

4.3.1 Corridor Survey

The power transmission line corridor extends south from the Rancho Seco Plant cyclone fence approximately 1,200 feet to the paved exit road. Currently, there are two transmission towers in this north/south corridor. The proposed transmission corridor width is 50 feet; however, an 800-foot-wide power transmission line corridor was surveyed by inspecting both sides of the existing power transmission line (400 feet wide on each side of the existing transmission line). Parallel transects 30 meters apart were surveyed by Jim Sharpe within the 800-foot transmission line corridor. Some previous ground disturbance has taken place on the north end. Disturbance includes surface grubbing and the installation of an underground phone line.

4.3.2 Recommendations/Conclusions

Project operations should be directed away from the area near the two historic placer mining features. Prior to construction, stakes and flagging should be used to mark these isolated features to prevent possible harmful impacts associated with construction.

4.4 Land Use

The new electric transmission line will cross District property from the existing Rancho Seco Plant switchyard, and continue south to the project site approximately 0.4 mile. Existing land uses along the transmission line route include grazing through District leases. The route is designated for Public/Quasi-Public Use, with a Resource Conservation Area overlay, and is zoned AG-80. The construction of these transmission towers would be consistent with the other utilities located in this area.

4.5 Noise

The transmission line corridor is not located near any sensitive receptors. Short-term temporary construction noise is anticipated during the transmission line construction period. Construction of the second set of transmission towers will occur at the same time as the construction of the initial towers. Thus, the portion of construction noise contributed by this activity will not increase but its duration will increase slightly. Due to the short-term nature of this activity and the distance to any sensitive receptors, it would not result in significant noise impacts.

4.6 Public Health

Since there would be no additional air quality impacts, except for some minor short-term construction impacts, the widening of the transmission corridor would not create a significant adverse public health impact.

4.7 Worker Health and Safety

Construction of the transmission corridor would result in a short-term construction effort. The combined effect of this change in construction would generate a minor cumulative increase in construction. However, by complying with the plans described in the AFC, there would not be a significant impact to Worker Health and Safety.

4.8 Socioeconomics

Construction of the 3 additional transmission towers and stringing the conductor will create a few short-term temporary construction jobs. The construction period would occur during the Phase 1 during the timeframe shown for construction of linears. Due to the size and similarity with construction of the initial transmission line, the increased workforce would not be significant. Therefore, impacts to the local economy, although positive, would be negligible in size. Due to the few workers required and the timing along with the construction of the other project linears, it would not create a perceptible change in the overall workforce size, peak workforce or potential impacts. Therefore, adverse impacts to schools, housing or public services would not occur. In addition, beneficial impacts to the

local economy would occur, but would be imperceptible due the limited size of this work effort.

4.9 Agriculture and Soils

Widening of the transmission line easement to accommodate additional support towers will affect the same types of soils as described in Section 3.9 (construction road). The transmission lines run approximately 1200 feet north of the Cosumnes Power Plant, and are located entirely on SMUD property.

As with the addition of the construction road, widening of the transmission line corridor may result in disturbance of soils. The same erosion and sediment loss control best management practices may be employed during and after construction activities.

4.10 Traffic and Transportation

Widening the transmission line corridor will not result in a significant increase in the number of construction-related vehicles accessing the plant site. Since there would be no traffic impacts, except for some minor short-term construction impacts, the addition of three transmission line towers would not create a significant adverse traffic impact.

4.11 Visual Resources

Construction of the three additional transmission line towers and the stringing of conductors would cause temporary visual impacts due to the presence of equipment, materials, and construction personnel. Construction activities would occur for only a short period at this location and would occur at the same time as the construction of the three originally-proposed towers. Due to the short-term nature of project construction and construction occurring contemporaneous with the proposed transmission lines, no substantial visual degradation of the area would occur from construction. Thus, the potential visual impacts associated with project construction are considered less than significant.

The addition of three transmission poles between the CPP switchyard and the RSP switchyard would not significantly change the landscape. This is because the three poles would parallel existing transmission line towers, and they would connect to open positions at the RSP switchyard (thus requiring no modifications to the existing switchyard). Views from the nearest sensitive receptors (residences south of Clay East Road) would not be degraded.

4.12 Hazardous Materials Handling

Hazardous materials used to construct the additional set of transmission poles will not differ substantially in type and quantity from those used on the first set of poles. Therefore, the addition of another set of transmission poles will not have a significant impact on hazardous materials handling.

Operation of the transmission poles will not require the use of hazardous materials.

4.13 Waste Management

Excavation of any additional soils necessary for the installation of additional transmission poles will not contribute to a significant increase in waste generation and will not have a significant impact.

Operation of the transmission poles will not generate any wastes.

4.14 Water Resources

As noted in the AFC, the transmission lines would cross wetland features and tower footings would be located within 250 feet of degraded wetland features. To the extent possible, footings would be located outside the wetland areas.

If wetlands are unavoidable, permits from the ACOE would be required. Compliance with these measure would reduce impacts to wetlands from the transmission towers in the same manner as described in the AFC.

4.15 Geologic Hazards and Resources

No significant impacts to geologic resources (if present) are expected. Construction of transmission towers should conform to applicable IBC codes for anticipated seismic accelerations expected along the length of the expanded transmission corridor. Any liquefiable or expansive soils identified during construction can be mitigated by over-excavating and replacing with non-expansive and liquefiable soil mixtures. Therefore, this action would not result in a significant adverse geologic impact.

4.16 Paleontological Resources

The location of the additional transmission line towers is within the area analyzed in Section 8.16 of the AFC (see also Confidential Figure 8.16-1). As stated in the AFC, construction of facilities in this area may result in significant adverse impacts to paleontological resources. Consequently, the paleontological mitigation measures proposed in the AFC would apply to the construction of the transmission towers.

5.0 CUMULATIVE IMPACTS

As noted in the analysis provided above, these three activities are small and when combined with the rest of the project will have an insignificant impact on the environment. No other projects in the vicinity of the Winters compressor station were identified by the County Planning Department. Other projects in the vicinity of the CPP plant site and gas line were identified and discussed in the AFC and in data responses (see Data Response #56, Set 1G). When these activities are combined with those described in the AFC and Supplement A and compared to other planned projects in the vicinity, no cumulative impacts would occur.

APPENDIX 1A

Owners Adjacent to the Winters Compression Station

APPENDIX 1B

Additional Owners Adjacent to the Gas Line

SMUD would like to add the following property owners to the CEC's mailing list.

APN: 132-0240-057
Owner: Dumas Ventures
Site Address: 8890 Eschinger Road, Elk Grove, CA 95758
Mail Address: 9307 Woodward Lake Dr., Oakdale, CA 95361

APN: 134-0280-012
Owner: Thomas Revocable Living Trust
Site Address: 11337 Dillard Rd., Wilton, CA 95693
Mail Address: same